OE FORM 6000, 2/69

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION

ERIC REPORT RESUME

ERIC ACC. NO. ED 056 249				
CH ACC. NO. AA 000 740	P.A.	PUBL. DATE Dec71	ISSUE RIEMAR72	

IS DOCUMENT COPYRIGHTED? YES ☒ NO ☐
ERIC REPRODUCTION RELEASE? YES ☒ NO ☐
LEVEL OF AVAILABILITY I ☒ II ☐ III ☐

AUTHOR
Carpenter, Polly; And Others

TITLE
Case Studies in Educational Performance Contracting. Part 3. Texarkana, Arkansas; Liberty-Eylau, Texas,.

SOURCE CODE CIQ74890	INSTITUTION (SOURCE) Rand Corp., Santa Monica, Calif.
SP. AG. CODE FGK21430	SPONSORING AGENCY Department of Health, Education, and Welfare, Washington, D.C.

EDRS PRICE 0.65;6.58	CONTRACT NO.	GRANT NO.
REPORT NO. R-900-3-HEW		BUREAU NO.

AVAILABILITY

JOURNAL CITATION

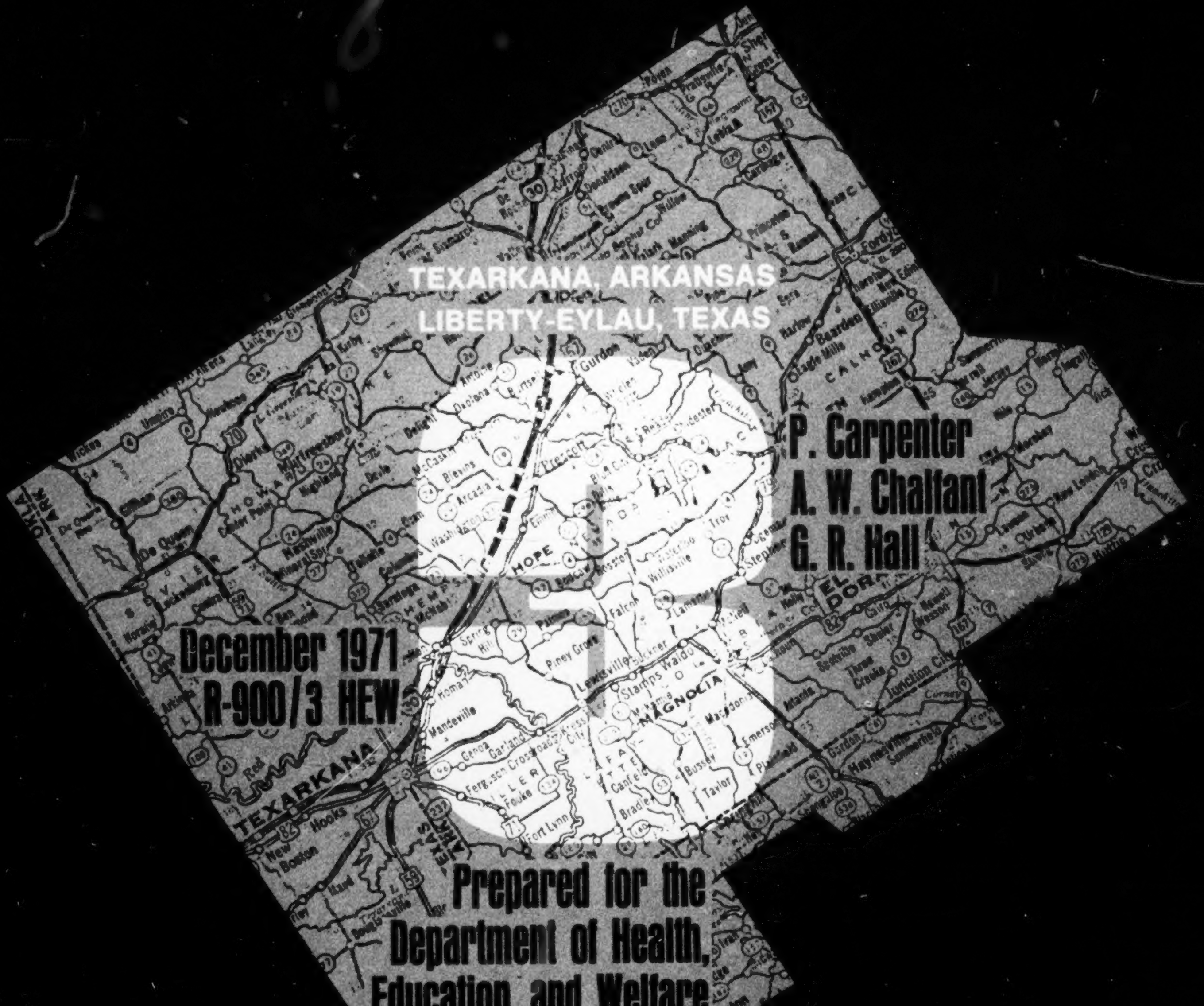
DESCRIPTIVE NOTE
154p.

DESCRIPTORS
*Performance Contracts; *Educational Change; Achievement Gains; Test Results; *Cost Effectiveness; *Improvement Programs; Program Evaluation; Dropout Prevention; Evaluation Techniques; Feedback; Models; *Case Studies (Education)

IDENTIFIERS
*Texarkana Model

ABSTRACT
The Texarkana model of performance contracting consists of five major elements: (1) turnkeying of cost-effective new technology as a basic program goal, (2) use of a performance contract for instruction, (3) use of a management support contractor, (4) selection of the learning system contractor by formal competition, and (5) use of independent evaluators and auditors. It is clear from the Texarkana experience in 1970-71 that performance contracting has been a mechanism for educational process change. In both years, the program successfully met the goal of reducing the dropout rate. It was unsuccessful, however, in producing any significant achievement gains as measured by standardized norm-referenced tests. Achievement measurement still has many logistic, administrative and conceptual problems. Texarkana evaluation procedures have enabled impressive feedback of pertinent managerial information. Model Cities provided a mechanism for solving some problems and a source of seed money for modest expansion and development of the program. For related documents, see ED 056247, 248, 250,251, and 252. (Author/CK)

CASE STUDIES IN EDUCATIONAL PERFORMANCE CONTRACTING



TEXARKANA, ARKANSAS
LIBERTY-EYLAU, TEXAS

P. Carpenter
A. W. Chalfant
G. R. Hall

December 1971
R-900/3 HEW

Prepared for the
Department of Health,
Education, and Welfare

1

Rand
SANTA MONICA CA 90406

This report was sponsored by the Assistant Secretary for Planning and Evaluation, Department of Health, Education and Welfare under Contract HEW-OS-70-156. Views or conclusions contained in this study should not be interpreted as representing the official opinion or policy of Rand or of the Department of Health, Education and Welfare.

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY
Rand Corp
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

Copyright © 1971
Published by The Rand Corporation

ED 056 249

December 1971
R-900/3 HEW

CASE STUDIES IN EDUCATIONAL PERFORMANCE CONTRACTING

P. Carpenter
A. W. Chalfant
G. R. Hall

3

TEXARKANA, ARKANSAS
LIBERTY-EYLAU, TEXAS

Prepared for the Department of Health, Education, and Welfare

3

AA 000 740

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Rand
SANTA MONICA, CA 90406

PREFACE

This Report is a product of Rand's study of performance contracting in education. The study is sponsored by the Assistant Secretary for Planning and Evaluation, U.S. Department of Health, Education and Welfare, under Contract No. HEW-OS-70-156.

Case Studies in Educational Performance Contracting comprises six volumes. Each is a self-contained study; together they provide a multifaceted view of performance contracting. The six volumes are:

1. R-900/1-HEW, *Conclusions and Implications,* by P. Carpenter and G. R. Hall
2. R-900/2-HEW, *Norfolk, Virginia,* by P. Carpenter
3. R-900/3-HEW, *Texarkana, Arkansas and Liberty-Eylau, Texas,* by P. Carpenter, A. W. Chalfant, and G. R. Hall
4. R-900/4-HEW, *Gary, Indiana,* by G. R. Hall and M. L. Rapp
5. R-900/5-HEW, *Gilroy, California,* by M. L. Rapp and G. R. Hall
6. R-900/6-HEW, *Grand Rapids, Michigan,* by G. C. Sumner

This study is the second of three Rand Reports on the subject. The first Report was J. P. Stucker and G. R. Hall, *The Performance Contracting Concept in Education,* The Rand Corporation, R-699/1-HEW, May 1971. The third Report will be a performance contracting guide intended for use by educational officials.

SUMMARY

The Texarkana performance contracting program is historically important and has been a model for other programs. The Texarkana model consists of five major elements: (1) turnkeying of cost-effective new technology as a basic program goal; (2) use of a performance contract for instruction; (3) use of a management support contractor; (4) selection of the learning system contractor by formal competition; and (5) use of independent evaluators and auditors.

The Texarkana program also is instructive because it is the first district to attempt to "turnkey" (adopt for school system use) a performance contractor's system. This study gives particular attention to this aspect of performance contracting in Texarkana.

Looking back on the 1969-70 program, we can derive four general implications for performance contracting. First, it is difficult to measure achievement. Beyond the need to counteract any incentives for "teaching to the test," testing requirements impose serious administrative burdens. There are also serious problems of test validity and test reliability.

Second, programs should make provisions for settling contract disputes when the original conditions envisioned do not apply. In Texarkana in 1969-70, the problem was the lack of valid test data; other districts have run up against other problems. Some fall-back system for contract settlement seems highly desirable.

Third, performance contracting creates new responsibilities and work requirements for school districts. These programs involve the school district as well as the contractor. If other organizations are also engaged in management support or evaluation, coordination and role-definition can become important.

Fourth, change is endemic to performance contracting. One of the strongest features of the Texarkana program is that it was planned for five years, so that development was possible. Using a new contractor and adding new programs beyond turnkey were major changes in 1970-71. In 1971-72 the program was changed further; instead of using private contractors to manage the learning centers, the school districts involved will take over their operation.

It is clear from the Texarkana experience in 1970-71 that performance contracting has been a mechanism for educational process change. Also, as an adjunct to the program, Texarkana has begun to develop program budgets and a coordinated manpower education program. The Rapid Learning Centers and the turnkey classrooms differ from the conventional Texarkana classrooms in materials and procedures. The turnkey classrooms, however, embody the 1969-70 Dorsett system in only the most general fashion. We expect performance contracting will lead to a much better compensatory education program in Texarkana and perhaps even to a general curriculum improvement. When the turnkey process is completed, however, we expect that classrooms will only indirectly reflect the technology and procedures used by the performance contractors.

In both years, the Texarkana program successfully met the goal of reducing the dropout rate. It was unsuccessful, however, in producing any significant achievement gains as measured by standardized norm-referenced tests. As a result, the school districts involved accepted the evaluator's recommendation and assumed direct operation of the learning centers. LEA control of these centers for 1971-72 will give Texarkana the chance to see if it has gained enough experience locally to do better than the private contractors.

Achievement measurement still has many logistic, administrative, and conceptual problems. Texarkana attempted to attack the conceptual problems in 1970-71 by using criterion-referenced tests for part of the payment to the contractor. Their experience indicates that the state of this art calls for considerable development.

Texarkana evaluation procedures have been a strong aspect of the program. In particular, feedback of pertinent managerial information was impressive. In 1970-71, the link between evaluation and management was strengthened by giving the evaluating organization a management support contract as well.

Lines of authority and responsibility continued to be complex. The result was that some parts of this multiobjective program received less attention than they needed.

Model Cities continued to figure importantly in the program. It has provided not only a mechanism for solving some problems, but also a source of seed money for modest expansion and development of the program. It has further helped to integrate the dropout prevention program with the other city efforts in education and manpower training.

ACKNOWLEDGMENTS

A particular debt of gratitude is owed to the Texarkana Title VIII project director, Martin J. Filogamo. Mary Lile, Dr. Lewis Lemmond, and Dale Watson, all of the project staff, were also very helpful. Dr. Larry Roberts and Dr. Dean Andrew provided valuable information about the evaluations, while Loyd Dorsett, of Dorsett Educational Systems, Inc., and Edward Miller, Educational Developmental Laboratories, were most cooperative in discussing the contractors' side of the program. The superintendents of both districts, Edward D. Trice of Arkansas and W. W. Mathis of Liberty-Eylau, were most helpful, as was Robert Bell of the Model Cities Agency. Lastly, general thanks are due all of the Rapid Learning Center and turnkey teachers, who graciously permitted observations of their classes and responded to our many requests for information.

We appreciate the advice and assistance of Rand colleagues P. W. Greenwood, S. A. Haggart, W. I. Harriss, and M. L. Rapp.

CONTENTS

PREFACE iii

SUMMARY v

ACKNOWLEDGMENTS ix

FIGURES xiv

TABLES xv

Section
I. INTRODUCTION 1
    Texarkana and the Birth of Performance Contracting 1
    Background Data on Texarkana 2

II. THE TITLE VIII DROPOUT PREVENTION PROGRAM, 1969-70 7
    Introduction 7

- Start of the Program 8
- The Texarkana Model 11
  - Turnkeying Cost-Effective New Technology 11
  - Use of a Performance Contract 12
  - Use of a Management Support Contractor (MSC) 12
  - Competitive Selection of a Learning System Contractor (LSC) 13
  - Independent Evaluation and Auditing 13
- The Dorsett System 13
- The 1969-70 Program 15
- Costs and Prices 17
- Evaluation and Audit 19
  - The Evaluator's Task 21
  - Determining Achievement Gains 23
  - Determining Program Effectiveness 25
  - Educational Process Difficulties 28
  - Test-Teaching 28
- Model Cities Support 32
- Conclusions 34

III. THE TITLE VIII DROPOUT PREVENTION PROGRAM, 1970-71 36

- The Program Design 36
- Turnkey Component 40
  - Plans for Turnkey 40
  - Turnkey in Operation 44
  - Turnkey Classrooms 46
  - Turnkey Achievement 48
  - Turnkey Conclusions 50
- Rapid Learning Center Component 51
  - The RLC Plan 51
  - RFP and Contract 52
  - Rapid Learning Centers 53
  - RLCs in Operation 54
  - RLC Achievement 55
  - RLC Program Cost 58

RLC Conclusions 61
Model Cities Support 62

IV. FUTURE PLANS 65
A Comprehensive Approach 65
The Art of the Practical 67
Conclusions 73

V. CONCLUSIONS 76

Appendix

A. CONTRACT BETWEEN TEXARKANA AND THE INSTITUTE FOR POLITICS AND PLANNING 79

B. TEXARAKANA-DORSETT CONTRACT 87

C. LETTER OF INTENT, TEXARKANA TO DORSETT 95

D. CONTRACT BETWEEN TEXARKANA AND REGION VIII EDUCATION SERVICE CENTER, 1969-70 98

E. CONTRACT BETWEEN TEXARKANA AND EPIC EVALUATION CENTER, 1969-70 100

F. TEXARKANA-EDL CONTRACT 107

G. CONTRACT BETWEEN TEXARKANA AND REGION VIII EDUCATION SERVICE CENTER, 1970-71 121

H. CONTRACT BETWEEN TEXARKANA AND EPIC EVALUATION CENTER, 1970-71 129

I. CONTRACT BETWEEN TEXARKANA AND EDUCATIONAL CONSULTANTS, INC., FOR PPBES DESIGN 137

FIGURES

1. Texarkana and surrounding region 3
2. Strategy for implementing a model dropout prevention program 37
3. 1970-71 Project organization 38
4. Project personnel organization chart 74

TABLES

1. Enrollment and Staff for Texarkana Districts in 1969-70 and 1970-71 5
2. Program and Resource Information for 1969-70 20
3. Educational Testing Service Guidelines 30
4. Program and Resource Information for 1970-71 59
5. Costs Per Grade-Level Achievement: Learning Centers versus Regular Classes 60
6. Objectives of the Texarkana Phase III Program 66
7. Proposed Title VIII Program for 1971-72 69
8. Training and Supervision Components: Individualized Instruction 71
9. Curriculum and Instructional Components: Instruction 72

I. INTRODUCTION

TEXARKANA AND THE BIRTH OF PERFORMANCE CONTRACTING

In any discussion of performance contracting, the Texarkana project must assume a prominent place. Historically, it pioneered the performance contracting technique;[1] it aroused nationwide interest in and controversy about performance contracting; and it was the locale of the first scandal over "teaching to the test" and the first dispute between a local education agency (LEA) and learning system contractor (LSC) over final payment.

The project is important also because it has served as a model for other performance contracting programs. True, Texarkana is not the only such model, but it incorporated many features advocated by authorities at the U.S. Office of Education and elsewhere who are concerned with educational accountability and technological change. In particular, the procedures reflected the theoretical concepts of Leon M. Lessinger, formerly of the United States Office of Education (USOE), and Charles L. Blaschke and his associates at Education Turnkey Systems, Inc. Texarkana procedures have been reflected in the Office of Economic Opportunity's performance contracting experiment involving 20 performance contracts, and in programs in Virginia, Dallas, Texas, Jacksonville, Florida, and other cities.

---

[1] During 1969-70, there were also some small performance contracting programs in Portland, Oregon, but these did not receive the public attention given Texarkana.

Texarkana's experience is particularly instructive because it has been involved with performance contracting for two school years, and has attempted to "turnkey" systems—that is, convert contractor-developed systems into regular school-district-managed programs. Since most school districts seek to turnkey successful performance contracting programs, this facet of the Texarkana program will receive special attention.

The plan of this Report is as follows: The remainder of this introduction presents some notable background data on Texarkana. Section II describes the five-year dropout-prevention program and the start of performance contracting in 1969-70. Section III describes performance contracting in 1970-71, discussing both the turnkey classrooms and the contractor-managed centers. The impacts of performance contracting on educational processes, products, and program participants will be considered in each section. Section IV deals with future plans, and Section V draws overall conclusions from the Texarkana experience.

BACKGROUND DATA ON TEXARKANA

According to one popular version of Texarkana's origin Colonel Gus Knobel, a railroad surveyor, nailed a board with the sign "TEX-ARK-ANA" onto a tree at the border of Texas and Arkansas and proclaimed, "This is the name of the town which is to be built here." He derived the name from the three adjacent states of Texas, Arkansas, and Louisiana, believing Louisiana to be only a few miles away (it was actually 33 miles).[2] As can be seen in Fig. 1, Texarkana is a crossroads town. It has three railways and four major highways going to such nearby cities as Shreveport and Little Rock, with Dallas and Oklahoma City a little bit farther. The Texas-Arkansas border, running down the main street through the post office, is a tourist attraction.

Texarkana had an estimated 1969 population of about 60,000, with 24,000 in Arkansas and 36,000 in Texas. Its area is roughly 25.1 square miles.[3] Although cotton used to be a sizable crop, its importance has declined along with agriculture in general. The economy is dominated by ammunition and ordnance manufacture

---

[2] *Today in Texarkana,* Texarkana Chamber of Commerce, 1970, p. 19.

[3] Texarkana Chamber of Commerce.

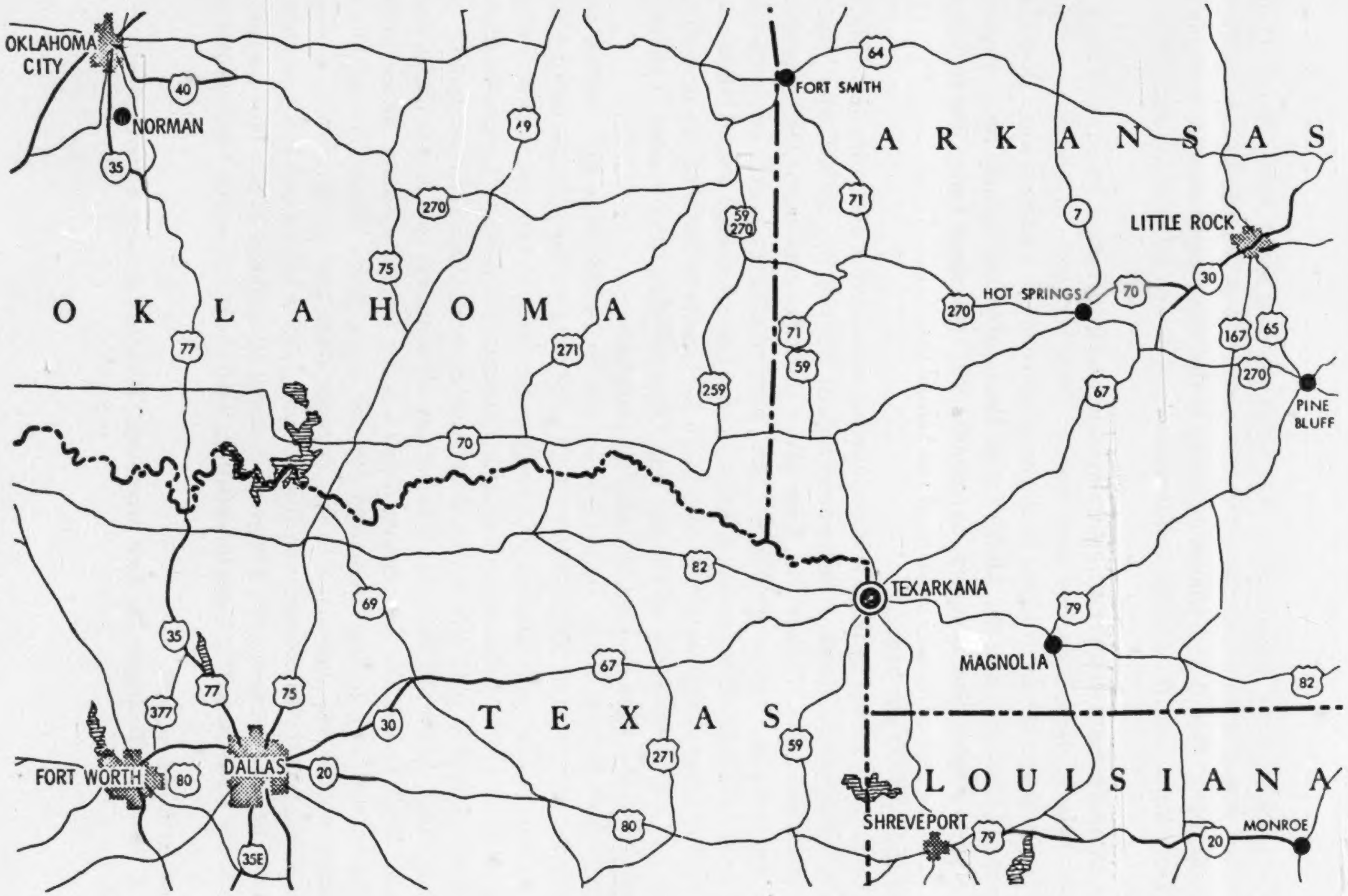


Fig. 1—Texarkana and surrounding region

at the Lone Star Army Ammunition Plant and the Red River Army Depot. Only seven other manufacturers employ over 100 people (tires, mobile homes, pickles, paper mill, etc.).[3] Retail and wholesale trade is the other main source of employment; Texarkana has 150 wholesale businesses and serves a 19-county retail trade area.[4]

Texarkana's main concerns are employment and integration. Its current unemployment rate is above 6 percent and there is little economic diversification. The immediate problem is how to adjust to the wind-down of the Vietnam war.[3] Both the Chamber of Commerce and the Model Cities Demonstration Agency have projects under way to attract new industry, but results will take some time. The region is not prosperous; more than 30 percent of the school pupils come from families earning less than $2000 per year.[5]

Texarkana is served by three school districts, each having about one-third black students. Texarkana, Texas, Independent School District No. 19-907, and Texarkana, Arkansas, School District No. 7 are about the same size—some 6900 students each. Liberty-Eylau, Texas, RHSD No. 708, a rural district partly contained in Texarkana, has about 2500 students. Each district has an elected school board and an appointed superintendent. Some basic data for the three districts are presented in Table 1. Only Texarkana, Arkansas, and Liberty-Eylau (pronounced "eye-loo") participated in the performance contracting program.

The budget for the urban Texarkana schools in 1970-71 was $2.7 million for current expenditures and $5.5 million for all expenditures including construction. The budget for Liberty-Eylau was $1.2 million for current expenditures and $1.3 million total. For Texarkana, Arkansas, this amounts to a per-pupil expenditure of about $440 compared with the national average of more than $765 per pupil.[6]

Texarkana, Arkansas, has nine schools: six elementary, two junior highs, and one senior high. One of the elementary schools is the former all-black junior high; following integration, it has been used for the sixth grade alone. The all-black elementary school was converted to special education and kindergarten classes. Liberty-Eylau has six schools serving the following grade levels: one K-2, one third grade and special education, one 4-6, one 7-8, one 9-10, and one 11-12. This unusual arrangement resulted partly from integration, with the black senior high becoming

---

[4] *Today in Texarkana*, p. 10.

[5] R. A. Bumstead, "Texarkana: The First Accounting," *Educate*, Vol. 3, No. 2, March 1970, p. 27.

[6] Ibid.

Table 1

ENROLLMENT AND STAFF FOR TEXARKANA DISTRICTS
IN 1969-70 AND 1970-71

Item	Texarkana, Arkansas	Liberty-Eylau, Texas	Texarkana, Texas
Enrollment			
1969-70	6929[a]	2489	6962
1970-71	6959	2580	6895
Percent black	33.6%	N.A.[b]	30%
Professional staff			
1969-70	300	N.A.	356
1970-71	310	150	363
Percent black	21%	N.A.	30%

[a] Computed from the average daily attendance of 6062, using the 1970-71 ratio of 87% between ADA and enrollment.

[b] N.A. = not available.

the new integrated junior high, and the white junior high becoming the 9-10 grade school.[7]

The second major issue in Texarkana is school integration. As of the 1960 census, Texarkana was 73 percent white and 27 percent black, with most of the blacks segregated in just a few census tracts. Reflecting this situation, there were several all-black schools at all levels that served the majority of black students. By early 1969, total integration had just begun at Texarkana's Texas High School, and was slated for all the schools over the next few semesters. Widespread integration was scheduled for Arkansas for the 1969-70 school year.

---

[7] Texarkana, Arkansas, uses three tracks (advanced, regular, and basic) in most schools. Liberty-Eylau tried tracking in 1970-71, but several principals said they would switch back in 1971-72. The only remedial reading classes are at the elementary schools. Both districts have vocational programs, with Arkansas depending on Model Cities funds.

Integration on the Texas side of the border had been accompanied by a serious increase in school dropouts. This was attributed to the wide disparity between educational achievement of whites and blacks in Texarkana. Consequently, the Texarkana, Arkansas, school officials felt it imperative that a special effort be made to prevent integration from leading to severe academic difficulties and widespread dropouts. At the same time, Texarkana's Model Cities Agency was exploring possible programs and funding sources. The result was the development of a five-year dropout-prevention program and the first large performance contract.

At the beginning, it was intended that all three districts would be involved in the dropout-prevention program that formed the context for performance contracting for educational services. Texarkana, Texas, dropped out of the consortium because of problems associated with racial desegregation guidelines, leaving Texarkana, Arkansas, and Liberty-Eylau, Texas, as partners. Texarkana, Arkansas is designated as the manager and the fiscal agent for the partnership. Unless otherwise stated, a reference to Texarkana includes Liberty-Eylau, Texas.

II. THE TITLE VIII DROPOUT PREVENTION PROGRAM, 1969-70

INTRODUCTION

The genesis of performance contracting in Texarkana, the Dorsett-Texarkana contract, and the operation of the Dorsett Rapid Learning Centers (RLCs) have been discussed often.[8] Here we summarize the program and discuss some aspects that merit special attention.

---

[8] Among the leading accounts are:

Richard A. Bumstead, "Texarkana, The First Accounting," *Educate*, Vol. 3, No. 2, March 1970, pp. 24-37.

L. Dorsett, "Interview," [Reading Newsreport,] Vol. 4, No. 2, November/December 1969.

Education Turnkey Systems, Inc., [Performance Contracting in Education,] Research Press, Champaign, Illinois, 1970.

Stanley Elam, "The Age of Accountability Dawns in Texarkana," [Phi Delta Kappan,] June 1970, pp. 509-514.

M. J. Filogamo, "New Angle on Accountability," [Today's Education,] Vol. 59, No. 5, May 1970, p. 53.

Leon M. Lessinger, "Accountability in Public Education," [Today's Education,] Vol. 59, No. 5, May 1970, pp. 52-53.

——, "After Texarkana, What?", [Nation's Schools,] Vol. 84, No. 6, December 1969, pp. 37-40.

——, [Every Kid a Winner: Accountability in Education,] Simon and Schuster, New York, 1970.

"Performance Contracting as Catalyst for Reform," [Educational Technology,] August 1969, pp. 5-9.

"Texarkana First," [Education Turnkey News,] Vol. 1, No. 1, April 1970, pp. 6-7. (Almost every subsequent issue of [Education Turnkey News] has contained reports on, or related to, the Texarkana program.)

Edward Willingham, "Education Report/Performance Contracting in School Tests Administrations' 'Accountability' Idea," [National Journal,] Vol. 2, No. 43, October 24, 1970, pp. 2324-2332.

START OF THE PROGRAM

In the fall of 1968, all three Texarkana districts were involved in planning for imminent full integration after some previous efforts in the junior highs at the ninth-grade level. The city had also acquired an active Model Cities Agency funded by the U.S. Department of Housing and Urban Development, which included a manpower and education component as one of its six major programs, and the agency was interested in means for educational reform. Dr. Joel Hart of the University of Arkansas, who was also associated with the Institute for Politics and Planning in Washington, D.C., was assisting Model Cities in teaching leadership skills in the Model Cities neighborhoods.[9] Hart had formerly worked with Charles L. Blaschke at the Institute, trying to set up a performance contract for young adults in Georgia. He also knew that a recent amendment to the Elementary and Secondary Education Act of 1965 (ESEA) had authorized money for comprehensive demonstration dropout-prevention programs. With a key problem in Texarkana integration being the wide disparity in achievement levels between black and white students, he thought a performance contract aimed at teaching basic skills to the lowest achievers as part of a full dropout-prevention program might be a solution.

Hart contacted Blaschke in early December 1968. Blaschke came to Texarkana at once, knowing that the deadline for planning grants for the dropout prevention program was just a week away. Blaschke went from the Model Cities office to the Arkansas district's coordinator of Federal programs, and thence to the superintendents on both the Arkansas and Texas sides of town and in Liberty-Eylau. The superintendents were not too happy about bringing in so many outsiders, but the need was pressing, so the school boards were briefed and they authorized development of the project. Blaschke's original work was covered under a contract with the Institute, reproduced in Appendix A. Strong pressure for integration was coming from HEW's threat to cut off Federal funds, especially the large amounts from "impacted area" relief (due to the large Army installations in the area) and Title I of ESEA (compensatory education). Given Texarkana's low level of school expenditures and its economic problems, this threat was serious.

In a Preliminary Proposal to USOE in mid-December, Texarkana stated that integration could be expected to produce a serious dropout problem. The dropout figures during the 1967-68 school year were 6 percent for Texarkana, Arkansas' program schools, and 4 percent for Liberty-Eylau's program schools. The proposal pointed out the conservative nature of the estimate due to an estimated large number of children of low-skilled families who never enroll. Most of the Model Neighborhood[10] schools are heavily black, and for the Arkansas district there was a median difference of 70 percentile points in scores on standardized achievement tests between the schools inside the Model Neighborhood and those outside. The proposal cited studies showing that academic deficiencies were the principal cause of dropouts, and argued that integration would force the Model Neighborhood students to try to compete with a much more accomplished peer group. Data cited by Bumstead sharply illustrate the need for remedial training:

---

[9] Bumstead, op. cit., p. 26.

> For example, consider the achievement levels of students at the three junior high schools in Texarkana, Arkansas. These schools are yet to be completely integrated [1968-69]. In reading achievement, students at the Jefferson Avenue Junior High School, a predominantly white, middle-class school, ranked in the 75th percentile on the Iowa Tests of Basic Skills. At College Hill Junior High School, where the races are about equally represented and where family incomes are somewhat lower, student achievement falls to the 20th percentile. At Washington Junior High School, an all-black school located in a Model Cities neighborhood, students read at the second percentile—yes, the second percentile.
>
> In all areas of achievement, the average grade level for ninth graders at Washington was 6.4, at Jefferson Avenue 9.4, as measured by the Iowa Tests of Basic Skills.[11]

The Office of Education awarded a planning grant to enable Texarkana to develop a formal proposal for a full five-year dropout-prevention plan. There are three noteworthy features of this preliminary proposal. First, it was conceived as one component of a community-wide plan to bring education and manpower development together. This plan in turn was but one component of the major attempt at city renewal catalyzed by the Model Cities. Though Texarkana was the first performance contract, and the actual program is much different from the proposal, it is still unusually well integrated with community efforts. While the dropout program focused on the academic deficiency aspects of career (not just school) problems, it was intended to treat causes as well as symptoms. Specifically, there was to be a quick catch-up program at the junior and senior high level to stave off integration problems, followed by remediation and then by curriculum reform at the elementary level, so that the students would be equipped for success from the beginning. All of this was planned to be absorbed into the regular schooling to produce lasting change.

---

[10] The areas of concentrated low-income families, largely black, serving as the target population of the Model Cities renewal.

[11] Bumstead, op. cit., p. 27.

Supporting this academic side there were to have been major programs expanding vocational orientation and training courses, including centers for those who had already dropped out. Other efforts included an adult General Equivalency Degree program at the advanced levels of the school program, and Head Start and Follow-Through at the beginning. Given this goal-oriented and comprehensive framework to operate in, the dropout program has had a strong effect of its own in fostering coordinated efforts from the Federal, regional, school, and community levels.

We emphasize that the original intention of the program was to be a part of a broad educational-manpower development effort aimed at community renewal, even though most public discussion of the program has focused on the narrower objectives of developing reading and math skills. It is important to note, however, that the grand design was not implemented all at once. The initial cost estimate was $750,000 for the first year. With Texarkana, Texas eliminated, USOE was unwilling to invest more than $250,000. The result was elimination of the Work Study component, elimination of a program to develop cost-effectiveness measures, elimination of a program to identify potential dropouts, and a reduction of the students to be enrolled in the EAC from 400 to 200.[12] The program finally funded by USOE focused almost exclusively on what came to be called the Rapid Learning Centers (RLC).

The second noteworthy feature of this proposal is that it reflected substantial inputs from Blaschke. This feature became institutionalized as the management-support component of the program. The Addendum to the proposal to USOE goes into considerable detail about the role and function of the Management Support Contractor, who at the start of the Texarkana program was Education Turnkey Systems, Inc., founded by Blaschke after he left the Institute for Politics and Planning.

The third feature is that the initial proposal did not discuss evaluation and auditing. This is noteworthy because a very important feature of the Texarkana program was the use of an independent evaluator and an independent auditor. These participants have been emphasized by many, including Lessinger (at the time of Texarkana one of the leading supporters of performance contracting at USOE), as key elements in the use of performance contracting to achieve educational accountability.

---

[12] Ibid., pp. 28-29. The 1969-70 program eventually accommodated 351 students.

THE TEXARKANA MODEL

The theory behind the program evolved from early theoretical papers of Lessinger, Blaschke, and others, to the initial proposal to USOE, to the final USOE proposal, then to the Request for Proposal sent to various learning system contractors, and finally to the program actually instituted. The result was what we call the Texarkana Model.

The Texarkana Model, as we view it, comprises five major elements: (1) turnkeying of cost-effective new technology as the basic program goal; (2) use of a performance contract for instruction, i.e., a contract between an LEA and an LSC for instruction in basic skills with payment based on the results of pre- and post-tests; (3) use of a management support contractor to assist the LEA; (4) selection of the LSC by a formal competition utilizing a Request for Proposal (RFP); (5) use of independent contractors for evaluation and/or educational auditing. We shall briefly explain each major element.

Turnkeying Cost-Effective New Technology

The LSC's role in the Texarkana program (and most other performance contracting programs) is viewed as transitory. As conceived, his role is to come into a school district to test out, demonstrate, and validate the cost-effectiveness of a new learning system. The technology is then to be transferred to the school district for in-house operation by the LEA. The performance contract is viewed as a catalyst for educational reform. Reform, in turn, is needed in order to achieve more fundamental goals such as dropout prevention, or elimination of functional illiteracy.

An educational system or learning system consists of a set of resources and processes designed to yield certain defined educational results. In the Texarkana context, learning systems came to be discussed in terms of three dimensions: (1) new materials and equipment employing new methods of learning; (2) environmental modification; and (3) new incentives. We shall discuss these elements later in the section on the learning system utilized by Dorsett Educational Systems, Inc.

One notion behind the Texarkana program was that the problems Texarkana faced required highly innovative solutions. The LEA selected Dorsett Educational Systems, Inc., of Norman, Oklahoma, who proposed a system different from those of most other performance contractors (including the Texarkana LSC for the second year). These differences are to some extent differences in degree, since most contractors seek to modify materials, environment, and incentives, to some extent (but not all; some concentrate exclusively on one or two of the three dimensions).

Use of a Performance Contract

Many people think of the Texarkana project as merely the contract between the district and Dorsett or, later, between the district and Educational Developmental Laboratories (EDL). As the list of five items illustrates, a performance contracting program can be a much more complex concept. Nonetheless, a contract for educational service with the payment based on achievement is the *sine qua non* of a program.

Two basic types of problems are associated with such contracts: first, their legality under state education codes, procurement statutes, union-LEA agreements, and similar laws, regulations, and agreements; and second, measurement problems associated with the use of tests. The former type of problem has up to now not been a major issue in Texarkana.[13] The latter problem has been a very major issue.

Use of a Management Support Contractor (MSC)

The management support contractor is an outside organization that assists the LEA in a number of ways at each stage of the program. Illustrative tasks are: identifying needs, helping to develop a program, preparing RFPs, identifying potential contractors, developing contractor-selection criteria and contractor-evaluation instruments, negotiating contracts, resolving operating problems that arise, and providing cost-effectiveness analyses of program results. Texarkana made extensive use of management-support services during the first year and less use during the second.

---

[13] Texarkana made use of legal counsel from the beginning and also had strong community support. There is no teachers' union in Texarkana.

Competitive Selection of a Learning System Contractor (LSC)

In Texarkana and similar projects, the LEA submitted an RFP to a number of prospective contractors. The resulting proposals were evaluated and, in the second step, the prices and bids were evaluated. Education Turnkey Systems, Inc., the Texarkana MSC for 1969-70, strongly believes that this feature not only results in educationally superior programs but produces lower costs.[14]

Independent Evaluation and Auditing

For 1969-70, an evaluation contract was let to the Arkansas Region VIII Education Service Center in nearby Magnolia, Arkansas. Dr. Dean C. Andrew and Dr. Lawrence H. Roberts were in charge. Although the evaluators were under contract and therefore *independent*, they were also referred to as *internal* evaluators. This latter usage reflects the fact that their assignment went beyond verification of achievement gains and involved them in assessment of processes and educational and managerial problems. While it is somewhat unusual to think of an evaluator as being both independent and internal, in this program this was the case.

There was also an independent educational auditor, EPIC Diversified Systems of Tucson, Arizona. Its function was to evaluate the evaluation procedures for the project and to verify the results reported by the evaluator. The evaluation and audit contracts are contained in Appendixes D and E. We shall have more to say about evaluation and audit later because they were strong features of the program.

THE DORSETT SYSTEM

Dorsett Educational Systems of Norman, Oklahoma, headed by Loyd G. Dorsett, won a spirited competition for the Texarkana contract.[15] Its response to Texarkana's RFP was judged best in terms of both the substance of the program and the price bid.

---

[14] "Competitive Bidding and Turnkey Operations," *Education Turnkey News*, Vol. 1, No. 1, April 1970, pp. 4, 5.

[15] In addition to the contract with the public schools in Texarkana, Arkansas, and Liberty-Eylau, Texas, in 1969-70 a Dorsett subsidiary, EVCO, had an adult education program in Texarkana funded by Model Cities. It involved 43 students. (For a description of the target population, see "Sleeper in Texarkana," *Education Turnkey News*, Vol. 1, No. 4, July 1970, p. 4.) This program was concluded during the 1970-71 school year. The Dorsett group in 1969-70 also had a small Model-Cities-sponsored program for nonreading children at Washington Junior High on the Arkansas side. This program was continued in 1970-71. These Model Cities programs will be further discussed in Sec. II.

The proposal submitted to Texarkana by Dorsett Educational Systems is excerpted in Appendix B. Basically, it had three thrusts. Dorsett proposed to replace the conventional textbooks and materials with new materials designed around the audiovisual equipment that was his firm's main product prior to the Texarkana project.[16] His educational approach emphasized the use of individualized programmed materials and contingency management. Dorsett also stressed environmental modification —changing the "image" of the classroom and the teacher. The RLCs were carpeted and air-conditioned. Air-conditioned classrooms are rare in Texarkana despite the region's hot climate. Dorsett's teachers were given new titles and special blazers to wear. Teachers were hired from a list of applicants for teaching positions in Texarkana who had not received positions because of a lack of openings. All were college graduates and legally certifiable, but not everyone had a credential or teaching experience. The aides were recruited in part from the Texarkana Titans, a local football team. Instead of school desks or carrels, Dorsett constructed office-like desks. In short, every effort was made to differentiate the environment surrounding the Dorsett system from the conventional classroom.

Perhaps the most controversial feature of the Dorsett system was the use of extrinsic motivators or monetary rewards for students. The educational theorists who designed Dorsett's system strongly believed in the need to provide disadvantaged students who had become "successful failures" with some new motivating force. Thus, access to reinforcement centers, Green Stamps, and radios were given for completion of lessons, and a television set was to be awarded to the outstanding student.

Considering the furor that the reward system generated in the educational sector, the reaction of some of the people connected with the program, now that it is over, is perhaps interesting. Loyd Dorsett told Rand that he now believes extrinsic motivators to have been of small value. He believes that his system is interesting enough and that the students are interested enough in the "hardware" so that no extrinsic motivators are needed.

A Texarkana official close to the program disagrees on both points. He told Rand that he believed the Green Stamps and other rewards were helpful in the beginning of the program to capture the student's interest but that the motivating force of the rewards declined rapidly. The observer believed that the most important motivational techniques, apart from academic success itself, were the traditional practices of performing other program functions, and having access to leisure time in the reinforcement center.

---

[16] Because performance contracting has become identified by some people with the extensive use of audiovisual equipment, it is perhaps useful to point out that most other performance contractors are less oriented toward teaching machines.

The radios and the television set have received much publicity in the press and in educational circles. A point that has not been mentioned is that in the confusion that surrounded the test-teaching scandal, many rewards were not awarded. On a visit to Texarkana during the summer of 1970, we noticed a number of radios and the television set in a storeroom. Texarkana officials told us that the school district was not in the business of hunting up students and handing out rewards. Dorsett, when we asked him about it, stated that he was no longer involved with the Texarkana schools; he had made the radios and television set available and then it had ceased to be his business. What the students made of the matter, we could not find out. Apparently it was not a matter of sufficient importance for them to come around and ask the schools for the rewards due them.

Teacher bonuses were also much discussed. Apparently some Dorsett stock was distributed to Dorsett's employees, but not on the basis of student performance. There was also talk of stock and stock option bonuses. The test-teaching scandal so depressed Dorsett's actual and prospective earnings that such promises were not very valuable. Teacher compensation was the same as for regular school employees, although overtime pay boosted take-home salaries.

THE 1969-70 PROGRAM [17]

The program involved 351 students—219 at the start and 132 later in the year. There were 208 male and 143 female students. The racial division was 203 white and 148 black. Six junior and senior high schools were involved. The students were in grades 7 through 12 and most spent two hours in the RLC—one hour on reading and one hour on mathematics. The initial group was composed of roughly equal numbers of (1) volunteers, (2) students selected by counselors, and (3) students randomly selected. The target population was potential dropouts; operationally, this was defined as students two or more grade levels behind in reading and mathematics tests and having an IQ above the special education level of 75. These tests were the Iowa Test of Basic Skills (ITBS) in Arkansas, and Science Research Associates Achievement Tests (SRA) in Liberty-Eylau. In fact, a number of students in the Dorsett RLCs did not meet the criteria. Of the initial 219 students, 57 had either lower IQs or higher reading scores, and for 37 there were no initial test scores.

---

[17] This description is based in part on D. C. Andrew and L. H. Roberts, *Final Evaluation Report on the Texarkana Dropout Prevention Program*, Region VIII Education Service Center, Magnolia, Arkansas, July 20, 1970.

Four centers were in trailers and two in refurbished classrooms. As discussed previously, considerable effort was expended to make them comfortable and attractive. The Dorsett M86 Teaching Machine was extensively used. This is a low-cost portable audiovisual machine using coordinated records and filmstrips. Other programmed materials were also used. For example, at the start of the program it was found that more basic materials were needed, and Job Corps texts were obtained. Behavioral management techniques such as contingency management and the extrinsic motivators previously discussed were also a feature of the program.

The project director was Martin J. Filogamo, an experienced teacher and principal in the Texarkana, Arkansas school system. He was hired in August 1970 and had an administrative assistant after October 1970. Both were on the LEA payroll.

Filogamo exercised the cognizance and control functions for the school system. Andrew and Roberts state that he viewed his function as being the principal of the six learning centers. Filogamo also served as an administrator, making a host of decisions about contractual questions and USOE funding matters, as well as program development. Further, he served as host to about 800 visitors, answered over 700 requests for information, and traveled throughout the United States making speeches and attending meetings and conferences on the Texarkana program.

Dorsett was represented by a resident director, Charles J. Donnelly, who was responsible for daily direction and coordination of the centers. Each RLC had a manager (teacher) and a teaching assistant (aide). All were carried on the Dorsett Educational Systems payroll.[18]

Others were involved with the program on a part-time basis. They consisted of the management support group, the evaluators, the educational auditors, Dorsett consultants, and an in-service cadre. The latter consisted of 20 Texarkana teachers who met at regular intervals for instruction in operating the RLC with a view to later turnkeying the operation. Each member of the cadre was paid for his time.

---

[18] This is an atypical feature of the 1969-70 Texarkana program. In most performance contracting programs, teachers remain on school district payroll to simplify administration and avoid problems of having different salary levels in the same schools.

COSTS AND PRICES

The pricing arrangement in the Texarkana-Dorsett contract (see Appendix B) was:

> Method of Cost Reimbursement
>
> a. In consideration for services rendered, Dorsett will be compensated on the basis of actual student performance.
>
> b. The student performance differential is determined by subtracting the entering grade level achievement in math and reading from the exit level. Entry status and exit status are based on the SRA and ITBS tests as weighted on a basis to be determined no later than February 1, 1970. This procedure will be applied to all assignees except withdrawals, and a small number of students, assigned by nonrandom procedures, to be mutually agreed by the parties to this contract, for whose learning services Dorsett will be reimbursed at the average hourly rate of other students.
>
> c. Dorsett will be compensated on the basis of obtaining one grade level increase per subject area in eighty hours of instructional center study for $80.00 or proportionally for each fraction thereof. According to the formula stated in the Dorsett Proposal, one grade level increase per subject area in 60 hours of instruction would cost $106.67 and one grade level increase per subject area in 110 hours of instruction would cost $58.18. Both parties agree that $58.18 for 110 hours required and $106.67 for 60 hours required represent the lower and upper limits of the cost reimbursement formula, with the following exception:
>
> d. Dorsett will grant a 7% discount on the dollar payment per grade-level-subject-increase if the average I.Q. of the students who are randomly selected is 100 or greater. The procedure for the selection and the termination of discount for additional assignees will be mutually agreed upon no later than February 1, 1970.
>
> e. The parties agree that the price of the $80/80 hour formula will be decreased as the operations are extended to additional students beyond the initial 200 enrollees to reflect operational efficiency through economies of scale, if any.

The payoff function for each subject was $P = \$80(HA)/80 \text{ hr}$, where P = payment per student, A = grade level advance, and H = hours of instruction. Several constraints were placed on this function. The maximum payment for the contract could not exceed \$135,000. The payment per student per subject could not exceed \$106.67. If more than 110 hours were required for a grade-level advance the payment decreased by \$1 for each additional hour ($P = 0$ if $H \geq 168$ for $A = 1$).

The payment was also constrained in another way that has not received as much attention. Not all students were included in the achievement/price arrangement. Those students not assigned "randomly"—and by implication those students not included in the target population—were to be paid for on the basis of a flat rate per hour of instruction. The flat rate was to be determined by the average payment per hour of instruction of those students included in the achievement/price arrangement. The contract speaks of a "small number" of students not randomly selected; in the event, this number amounted to two-thirds of the students selected. Moreover, owing to selection difficulties (such as one school's pre-test being misscored)[19] it appears that not all the randomly selected students were from the target population. Also, some of the target population probably moved, failed to attend for the minimum number of hours, or did not have both a pre- and post-test. Applying the contract rigorously would have meant that the achievement gain scores of a small subgroup would determine the payment for all students.

In fact, however, Texarkana and Dorsett agreed to interpret this clause loosely and apply the achievement-payment formula to all students in the target population even if they had not been selected randomly.

In addition to the payment for instruction, Dorsett also sold Texarkana teaching machines, other equipment, and materials. The profit, if any, on these sales must be considered from Dorsett's point of view when computing the risks involved in the contract.

In sum, to say that a performance contractor is paid on the basis of test scores is an oversimplification. More precisely, the cost of instructing some students will be reimbursed based on test scores. How many students fall in this category and how many in other categories depends on how the target population is defined, how the students in the program are selected, how the payment is arranged for students outside the target population or outside the "guarantee," and how many students take pre- and post-tests. Also, in addition to the payments for achievement, contractors may get other payments, for example, for materials or training or other services.

The Dorsett price-bid was heavily influenced by his forecast of substantial achievement gains. Donnelly, formerly Dorsett's resident manager,[20] stated that with penalties and incentives the payment per achievement year could have varied from $59 to $109. Donnelly computed the actual cost to Dorsett at $68 plus home/office overhead of $13 for a total of $81 per achievment-year of gain. He computed the Texarkana school system cost as $125 per achievement year.[21]

---

[19] Bumstead, op. cit., p. 30.

Very few good cost figures exist. The Dorsett figures used by the evaluator are incomplete and perhaps inaccurate. A rough ballpark estimate of what it might cost a school district to run a Dorsett-like program can be obtained by examining the resources used, as shown in Table 2. Assume that the six teachers each received about $6,500 per year and each of the six aides received about $3,000. Also assume that the 95 M-86 machines cost $200 each and that the materials, supplies, and incentives cost $20,000. Training and consulting might then amount to $3,000. Finally, figuring $2,000 per trailer or classroom for remodeling and furnishings yields a total of $12,000. On this rough basis, such a program might cost $111,000. We hasten to add that these figures do not include supervision cost by either the LEA or LSC. Moreover, the figures do not reflect what the program may have cost Dorsett. The figures are, at best, what one might expect to pay for a Dorsett-like program using cost factors that are typical in the Arkansas area.

The Texarkana-Dorsett contract remains unsettled as of this report, December 1971. As will be discussed later, the evaluators decided that no meaningful post-test data could be obtained. Dorsett disagrees. He told us in August 1971 that unless Texarkana accepted one of his offers to settle the contract by means of purchase of material, he was going to institute a legal action promptly. Even if one were to accept Dorsett's gain data, however, only about half the students in the regular program (49 or 51 percent, depending on calculation method) were in the target population and had pre- and post-test data. The achievement scores for this half of the group would determine the compensation for the whole group.

EVALUATION AND AUDIT

As evaluator, Texarkana chose the Region VIII Education Service Center in Magnolia, Arkansas, about 50 miles away. The center serves schools in an eight-

---

[20] Donnelly left Dorsett Educational Systems to join Quality Educational Development, Inc. (QED), another prominent performance contractor.

[21] Economics of Performance Contracting," *Education Turnkey News*, Vol. 1, No. 9-10, December-January 1970, p. 7.

Table 2

PROGRAM AND RESOURCE INFORMATION FOR 1969-70

Characteristics of students	Grades 7-12; educationally disadvantaged (at least 2 years below grade level); IQ at least 75
Program scope	
Number of students	350, reading and math
Class time	1 period math, 1 period reading
Class size	20 students per classroom area
Facilities	
Space	4 trailers, each 900 sq ft; 2 classrooms, each 1000 sq ft
Utilization	100 percent
Furnishings	Desks, carpet, air conditioning
Staffing	
Certified teachers	1 per center
Special teachers	0
Paraprofessionals	1 per center
Other personnel	Project manager
Equipment	Dorsett M-86 Teaching Machines
Materials	Filmstrips, records, programmed texts
Pre-service training	8 days per teacher
In-service training	No formal training
Incentives	
Students	Green Stamps, transistor radios, 1 TV, some popular records (and player), games, puzzles, popular magazines, free time
Teachers	Dorsett stock bonus and options

county area and is partly supported by a Title III grant under the Elementary and Secondary Education Act of 1965. The center offers training services and program planning, implementing, and evaluation services. It has a professional staff of 11. The evaluators not only had appropriate professional backgrounds, but the advantage of knowing Texarkana schools and being geographically close so that they could interact with the program frequently and on short notice.

More important, the Region VIII center was designated the *Internal* (as well as *Independent)*[22] Evaluator and provided managerial feedback during the program. The evaluators used a "contact report" form filled out on each visit to record events and problems that arose as they happened. These reports provided a mechanism for identifying problems for program management and suggesting resolutions. This mechanism was extremely important in the test-teaching episode.

Texarkana chose EPIC Diversified Systems Corporation of Tucson, Arizona, to be the educational auditor. EPIC offers various evaluation, need-assessment, planning, training, and audit services. EPIC is an outgrowth of the EPIC Evaluation Center, also a Title III project. The Region VIII center uses for its evaluation activities the EPIC Scheme of Evaluation developed by the EPIC Evaluation Center.

The project budgeted $11,500 for the internal evaluation and $5,400 for the audit. The difficulties in settling the contract with Dorsett led to some additional evaluation and auditing work.

The Evaluator's Task

The Final Evaluation Report[22] prepared by Dr. Dean C. Andrew and Dr. Lawrence H. Roberts of the Region VIII center in Magnolia is a model of organization, clarity, statistical sophistication, professional expertise, and good sense. There was a serious lack of coordination, however, between the evaluation design and the initial planning for the contract and program. As the Final Evaluation Report explains:

> The operation of the Texarkana Dropout Prevention Program officially started on November 3, 1969, with four of the rapid learning centers starting. The other two started early in January, 1970. The internal evaluators were employed after the start of the project and held their initial meeting with the project director on November 13, 1969. The internal evaluators

---

[22] Andrew and Roberts, op. cit.

> were not involved in the initial planning; and thus, procedures, information, and design had to be developed "after the fact." To further complicate the evaluation process, the internal evaluators did not have access until January 13, 1970, to the original proposal which had been submitted for the Title VIII, ESEA grant. Due to this fact, the internal evaluators took the Dorsett Company's proposal and wrote behavioral objectives based on what the company said they would accomplish. *The evaluation design was based on these objectives.* After the objectives were written, the official contract with Dorsett was finalized. The contract did not require Dorsett to do some of the tasks that were written in their proposal, such as development of study habits, improvement of speech, improvement of grooming practices, etc. In a conference involving the internal evaluators, the project director, and representatives of the U.S. Office of Education held on January 13, 1970, the project director was requested by the representatives of the U.S. Office to revise the original proposal to more correctly reflect what was being done in the program. This revised proposal was submitted in late February, some four months after the start of the project and three months after the evaluation program was implemented. The revised proposal contained some performance objectives which were not entirely consistent with the evaluation design objectives. In a telephone conversation between Mr. Lewis Walker, of the U.S. Office of Education and the project director, it was agreed that the evaluation objectives be used as the objectives of the current (1969-70) operational program, and that the objectives in the revised proposal be used as the starting base for the development of the evaluation design for the 1970-71 continuation grant.[23]

In short, in the first year of the Texarkana project the program design and evaluation design were out of phase. The late start of the evaluation made it difficult to gather pre-test data in time for the first exit test.

A second problem that Andrew and Roberts faced was: Should the evaluator evaluate the contract or the program? As Andrew and Roberts note, the goals that they believed the program were addressing turned out to be different from the tasks that Dorsett contracted to perform. As it worked out, Andrew and Roberts took on both tasks; they attempted to determine the contribution of the RLCs to the broader objectives of the Texarkana schools.

---

[23] Ibid., pp. 13-14. (Italics in original.)

In part, the problem was due to a confusion in roles. The auditor, EPIC, who also produced an excellent report, had been given the task of "providing information for decisionmaking" (see Appendix E). Possibly the intention was that the evaluator would focus on what the contractor was to receive in the way of payment and the auditor was to concentrate on whether the RLCs contributed to Texarkana's program, which seems the reverse of what one would expect. However, the management support group, Education Turnkey Systems, was also responsible for cost-effectiveness analyses and general decisionmaking guidance. The roles and functions of the three groups, and who had responsibility for a broad program assessment, were not obvious during the first year and in fact led to meetings and discussions about respective roles, functions, and responsibilities.

Determining Achievement Gains

After a thorough and sophisticated analysis, the final report concludes that Dorsett had exposed so many test questions that no statistically valid achievement gains could be determined. No test sources were published in the Final Evaluation Report.

The Interim Report and the continuation grant application sent to USOE did contain scores based on the February, March, and April exit tests. These scores were given wide publicity as "miracles" and attracted much attention. The Final Report disregards these scores but because of the attention they received we will briefly review them.

There were initially about 219 students in the learning centers, with 351 eventually participating by program end. There were four exit or post-tests given during the program, as follows: February 2, 57 students; March 2, 59 students; April 6, 96 students; and May 22, 285 students. The evaluation design set up a control group that was equated with the experimental group (for each test separately) on pre-test vocabulary, reading comprehension, and arithmetic scores; and on race, sex, grade level, and school. There was no separate control on intelligence, because of lack of scores for the controls. For the group that took the February test, the experimental group showed a significant gain over the control group only in vocabulary (for the experimentals, the percentages gaining at least one grade level were 63, 37, and 33, respectively, for vocabulary, reading comprehension, and arithmetic). The March test group showed a significant gain over controls in both vocabulary and reading (with percentages gaining at least one grade level of 49, 47, and 39), and the April test group showed no significant gains over controls. Looking at the multiple testing effect, for students taking both the February and March tests because they failed the February test, there was a mean decrease on vocabulary for experimentals and an increase for controls. There was no mention of significance levels. On scores alone, the achievement gains are equivocal but there was also test-teaching, according to the evaluator.

The Final Evaluation Report includes a large section on the number and percentage of items exposed for each form and grade level of each test. There is also an informal chronology of when a given type of item was put in the RLC materials. The evaluators concluded that the vocabulary was 100 percent exposed on the ITBS and about 85 percent on the SRA, and these items were introduced in concentrated lessons before the first (February) exit test. Before the March test, significant exposure was added on reading comprehension and arithmetic items, in the form of review lessons along with priority lists for the center directors (giving the lessons to review two weeks before the exit test). Since the last priority list was issued just after the April test, the evaluators decided that all tests were taught to varying degrees. The evaluators obtained a formula from Educational Testing Service of Princeton, New Jersey, from which they calculated the number of exposed items required to lower subtest reliability below 80 percent (the level chosen for usability for payment, since that was the overall test reliability level). No vocabulary items and only half of the arithmetic items on the ITBS met the ETS criterion. On the SRA tests, no reading, 25 percent of the vocabulary, and 50 percent of the arithmetic met the criterion.

Since payment was to be based on the average of vocabulary and reading together and on the total of arithmetic, the evaluators concluded that none of the exit tests was usable for payment purposes. The actual scores will remain unavailable until contract payment is legally settled with Dorsett.[24] It is interesting to note that Loyd Dorsett does not consider reliability level in the fact sheet he circulated, but merely presents the percentage of exposed items over total items (and his 3 percent estimate is clearly too low if the evaluator is right about the number of questions exposed). Dorsett's position was set out in two letters reproduced in the Final Evaluation Report.

---

[24] As of December 1971, the contract was still unsettled, with no apparent action being taken.

Determining Program Effectiveness

Andrew and Roberts consider a number of different program-effectiveness and product criteria.

1. The students were to respond positively to the rapid learning center program as indicated by: (1) a feedback questionnaire, (2) decrease in school absenteeism, (3) decrease in dropout frequency, and (4) improving grades in other classes.

Due to the many entrance and exit points during the year for the RLC program, only 67 students took both the entrance and exit questionnaire. There is a slight positive attitude increase, but it is not significant. What is interesting is that most of the entrance responses are already pretty positive, which may be because the first questionnaire administration didn't occur until after 3 months of instruction. Or the questionnaire might be invalid, since the "entrance" responses seem untypically positive for the population.

The shifting of the RLC population made it difficult to find equated controls, but for one sample of 33 RLCs and controls the RLCs had a slightly but not significantly higher rate of absenteeism. So the program definitely didn't lower absences.

The decrease in dropouts was very dramatic, as discussed below.

Again, only a sample of between 25 and 32 students was available, for each of four subjects in two semesters (the first of the RLC program and the semester preceding the program). By inspection, the RLC English grades improved a bit while the controls declined, but the grades in the other three subjects declined for both groups. The English result is encouraging, but needs control for teacher knowledge and expectations.

2. The student in the RLC program was to display an increased vocabulary, reading comprehension, and arithmetic knowledge as indicated by scores on the ITBS and SRA achievement tests.

However, there were no valid scores due to teaching for the test, as noted above.

3. The initial evaluation design states that: "The project director will display knowledge of the feasibility of a rapid learning center program for all students in the school system as indicated by: (1) feasible cost, (2) available space, (3) appropriateness of RLC material, (4) acceptance by faculty and parents, and (5) permanency of student achievement gains."

The cost comparison between the RLC programs and the regular school's cost for producing a one-grade level increase in achievement was not made due to the invalid post-test scores for the RLC program. Further, Dorsett noted that the cost data provided early in July 1970 had a number of omissions. A final cost of $146,357 is given, which works out to $542 per student, and includes one-time start-up costs. However, only about $140,000 of the quoted program budget of $250,000 seems allocated to Dorsett. The evaluator was under strong time pressure, for no attempt was made to compute the average operating cost for the regular schools.

The space study wasn't conducted due to some buildings being phased out under a total desegregation plan. It was correctly estimated that only the mobile units and some refurbished classrooms would be available for the following year's turnkey learning centers; also, the curriculum wasn't fully rated due to the project director's lack of time.

All teachers in the target schools were given a feedback questionnaire on the RLC program. Of the 220 that responded, all had heard of the program and 70 percent had visited an RLC center. Further, most teachers felt that the RLC materials would be effective in their classrooms, especially with a teacher aide. Thus the climate for change was termed good. Finally, for the 73 teachers that had RLC students in their classrooms, the majority felt that school attitude and class discussion had improved, while grades, study habits, class attendance, and appearance had not.

A questionnaire on the program was also given to all parents of RLC students, with 118 responding (about half). Almost 97 percent had heard of the program, but only 5 percent had visited a center. Even though only a little more than half noticed changes in school behavior, about 92 percent wanted the program in the regular school and thought it would help their children get ahead and graduate from school. This result plus the teachers' favorable reaction to the programmed materials seems a major influence in the decision made later to purchase the Dorsett machines and programs for the turnkey centers.

Retention tests were eliminated when USOE revised the original proposal.

4. The students in the rapid learning center program were to demonstrate increased application of pronunciation skills as indicated by scores on the Photo Articulation Test.[25]

The pre- and post-tests were administered to individuals and scored by certified speech therapists. For 37 RLC students, there was no significant reduction in the average errors for the group, but the initial average of 3.5 errors seems small to begin with.

---

[25] Objectives 4 to 7 were *not* included in the Dorsett-Texarkana contract.

5. The students were to display knowledge of the world of work by choosing at least one employment goal that is realistic and achievable as judged by the student's counselor.

Unspecified time pressure prevented all but 38 of the goals questionnaires given to all RLC students (in May) being rated by counselors and returned to the evaluator. The 38 show a strong realistic rating, but that doesn't seem very meaningful without a pre-test.

6. The students in the rapid learning center program were to display an increased knowledge of study skills as indicated by scores on the SRA Study Habits Checklist.

126 RLC students took both the pre- and post-tests (orally administered to minimize reading difficulty) but showed no significant gain. However, there should have been controls, since they might have shown a decrease.

7. The students were to demonstrate an increased application of good grooming as indicated by an appearance checklist.

Results were unavailable, since the teachers did not have time to do the ratings.

In short, the achievement test data were unusable and most indicators gave unclear signals about the impact of the program. There was, however, one dramatic exception—the decrease in the dropout rate, the ultimate goal of the program.

For 351 Rapid Learning Center students, the dropout rate for the eight months of the contract was 6.8 percent while that for 235 equated controls was 17.9 percent. Further, the RLC dropout rate was also noticeably below the overall dropout rate of 8.3 percent for the 4340 students enrolled in the six target schools. Finally, since there were three methods of selection resulting in many students not meeting the target-population criterion of two grade levels below and IQ of at least 75, the dropout rates of RLC students meeting and not meeting this entry criterion were compared. For 181 students meeting the entry criteria, the dropout rate was only 1.7 percent, while for 170 students not meeting criteria the rate was 12.4 percent. Hence, the contract program was particularly effective for those students that met the program criteria, i.e., the population for which it was designed.

Educational Process Difficulties

A host of operating difficulties, such as lack of records, confused schedules, and similar problems plagued the program. The evaluators chronicled a large number of these and then explained them as follows:

> Some were results of lack of planning; others were due to lack of guidelines; some were due to unclear understanding of roles and functions; some were due to slow negotiations; some . . . to a reduction in funds; and others were unanticipated problems that occur when any new developmental program is initiated.[26]

Any innovative program will encounter start-up problems. Funding cutbacks also create problems. We would emphasize two other causes, however. First, the program involved a large number of persons and organizations. There were the Texarkana project director and his office, Dorsett and his firm, the management support contractor, the evaluator, the auditor, the Model Cities group, and USOE, the sponsoring agency. How the roles and functions of these various groups were to be distinguished and how their activities were to mesh should have received more planning attention. In the pressure to get the program under way, these matters were left to work themselves out with resulting confusion.

Second, the evaluation was not coordinated with product planning and contract negotiation. The two aspects were out of phase and again produced confusion.

It should be emphasized that these phenomena were not peculiar to Texarkana. We have encountered them in most programs.

Test-Teaching

It was understood from the start of the program that Dorsett had analyzed the ITBS and the SRA in designing his materials. It was also understood that he would "teach to the test" in the sense of teaching the skills tested by those instruments. By common consent this would, for example, permit teaching a student how to divide a common fraction by another common fraction, if such a skill were to be tested by the ITBS or the SRA. However, it was assumed that the numbers in an exercise example would differ from the numbers in test questions.

---

[26] Andrew and Roberts, pp. 33-34.

In reading, it was understood that Dorsett proposed to teach a 3000-word vocabulary containing the words encountered on the ITBS and SRA. However, drilling on words actually used in the specific instruments was regarded as beyond acceptable limits.

The strategy of reading test paragraphs was regarded as being within admissible standards for teaching reading comprehension. Putting into daily exercises the actual paragraphs used on the test instruments was regarded as inadmissible.

It should be noted that despite these general understandings, no specific guidelines for distinguishing inadmissible from admissible practices were furnished Dorsett. After the issue arose during the May exit testing, the Educational Testing Service was called in as a consultant to the evaluator and provided the guidelines reproduced in Table 3. These guidelines have been made a part of several subsequent contracts in Texarkana and elsewhere.

Dorsett admitted that a number of test questions had been exposed. The issue then became the extent to which the achievement data were polluted. Dorsett's basic procedure has been to take the gains (which he believes averaged 1.5 grade levels in both reading and mathematics) and discount them for the number of exposed test items. He concluded that the reduction in gains was less than 3 percent.[27] The evaluators' procedure, based on suggestions from Educational Testing Service, was to determine the number of items that could be exposed and still yield a statistical reliability of .80 for the given group of test items. Using this procedure they decided that all the May scores were invalid.

The Texarkana School Board was placed in the position of adjudicating the dispute. Dorsett threatened legal action if the evaluators' position were accepted. On the other hand, the Board was hard put to ignore an independent evaluation by competent and respected experts that it had hired. The issue of how much Texarkana owes Dorsett remains unresolved to this day.

There are two morals to this story. First, expect the expected. There was a great likelihood that any contractor might step across the line from admissible to inadmissible teaching-to-the-test. At a minimum, rules such as those given Dorsett in the spring should have been furnished the previous fall.

The second moral is: have a fall-back position. It would have been much easier for Texarkana had some procedure for resolving the contractual obligations been written into the contract. It is not merely a matter of test-teaching; strikes, unusually bad weather, logistics problems, and a host of other possible difficulties can

[27] *Catalog of Programs*, Dorsett Educational Systems, Inc., Norman, Oklahoma, 1971, p. 3.

Table 3

EDUCATIONAL TESTING SERVICE GUIDELINES

A test item and an instructional exercise are to be considered the same if

(1) Their *wording* is identical in all respects despite a change in format.

Example: A. Which of these is a way to find the circumference in inches of a circle with a 6-inch diameter?

(1) 3x3.14
(2) 6x3.14
(3) 3x3x3.14
(4) 2x6x3.14

B. Which of these is a way to find the circumference in inches of a circle with a 6-inch diameter?

(1) 3x3.14 (2) 6x3.14 (3) 3x3x3.14
(4) 2x6x3.14

(Note the change in *arrangement* of options)

(2) The wording of the stem and the wording of the *correct* option are identical; despite the fact that other options have been changed.

Example: A. Which of these is a way to find the circumference in inches of a circle with a 6-inch diameter?

(1) 3x3.14
(2) 6x3.14
(3) 3x3x3.14
(4) 2x6x3.14

B. Which of these is a way to find the circumference in inches of a circle with a 6-inch diameter?

(1) 3.14x3
(2) 6x3.14
(3) 3x2.14
(4) 2x6x2.1416

(3) The correct option is identical and the *main sense* of the stem has been retained despite a *minor change* in wording.

Example: A. Which of these is a way to find the circumference in inches of a circle with a 6-inch diameter?

(1) 3x3.14
(2) 6x3.14
(3) 3x3x3.14
(4) 2x6x3.14

B. The number of inches in the circumference of a circle with a diameter of 6 inches is

(1) 6x3.14
(2) 3x3.14
(3) 3x3x3.14
(4) 6x6x3.14

Table 3--*continued*

(4) The main sense of the whole item has been retained despite the fact that it has been restated in the negative.

Example: A. Which of these is a way to find the circumference in inches of a circle with a 6-inch diameter?

(1) 3x3.14 (3) 3x3x3.14

(2) 6x3.14 (4) 2x6x3.14

B. The number of inches in the circumference of a circle with a diameter of 6 inches is *not*

(1) 6x3.1416 (3) 3x3x3.14

(2) 6x $\frac{22}{7}$ (4) 2x3x $\frac{22}{7}$

(5) The main sense of the *stem* has been retained despite a minor change in wording; the correct option is identical; but one or more *incorrect* options have been changed or omitted.

Example: A. Which of these is a way to find the circumference in inches of a circle with a 6-inch diameter?

(1) 3x3.14 (3) 3x3x3.14

(2) 6x3.14 (4) 2x6x3.14

B. The number of inches in the circumference of a circle having a 6-inch diameter can be found by which one of these?

(1) 3x $\frac{22}{7}$ (2) 6x3.14 (3) 3x3x3.14

(6) The item has been changed from a multiple-choice to a true-false item by retaining the stem of the multiple-choice item and incorporating in the stem one of the options (correct or incorrect).

Example: A. Which of these is a way to find the circumference in inches of a circle with a 6-inch diameter?

(1) 3x3.14 (3) 3x3x3.14

(2) 6x3.14 (4) 2x6x3.14

B. The number of inches in the circumference of a circle with a 6-inch diameter is 3x3x3.14

○ True ○ False

C. A circle with a 6-inch diameter has a circumference of 6x3.14 inches.

○ True ○ False

SOURCE: Andrew and Roberts, op. cit., pp. 58-59.

make it impossible to compute achievement gains as originally intended. A contingency plan would seem to be a program essential.[28] Unfortunately, we know of no performance contract with such a plan, and we know of several in which, *ex post facto,* the parties would have liked to have one.

MODEL CITIES SUPPORT

The involvement of the Model Cities Demonstration Agency in the performance contracting program has been vital and has been too little discussed. Not to take credit away from the Texarkana schools, it is still fair to say that Model Cities has been available at some crucial times.

The role of Model Cities in getting the program going has been noted. The next helping hand came in November 1969, when Donnelly and Filogamo discovered that Washington Junior High had a great many nonreaders and too many students for one center. By January, Model Cities had financed and helped plan for a Reading Clinic for the nonreaders, and a second RLC was put in operation. The Reading Clinic brought to fruition one of the three "Related and Ancillary Programs" mentioned in the 1969-70 RFP, and was crucial in helping Dorsett handle the demanding all-black Washington Junior High.

The Reading Clinic contract, signed with Dorsett in January 1970, was a subcontract since the Texarkana schools had already contracted with Model Cities for the necessary money. It was also a performance contract of sorts. If the contractor did not achieve an average gain of at least 1.25 grade levels, both parties agreed to negotiate cost payment, with the Title VIII formula used as a guideline. Similarly, a bonus was possible for gains above 3.75 grade levels. About $25,800 would be paid in gradually *decreasing* fixed amounts, approximating an instructional cost per hour of $1.88. As with the Title VIII contract, equipment was purchased separately, in advance.

By February 1970, 43 Washington Junior High students in grades 7, 8, and 9 were selected by the principal and the counselor, and classes were begun. The instruction was done by two young college graduates in a mobile trailer, primarily using the Evans reading materials (developed under EVCO, a subsidiary of Dorsett). The students were given a large number of tests, including: a pre and post of the Job

---

[28] This point is also made in *Education Turnkey News,* Vol. 1, No. 3, June 1970, p. 5.

Corps test, pre and post of the ITBS, the Botel Word Recognition and Comprehension tests, the oral Slosson IQ test, and the Slosson drawing test to detect brain damage. The average IQ was about 70, and 23 students scored below the first grade level on the Botel. It was clearly a challenging group to try to motivate and educate in just four months.

The program ended about May 30th, with 40 of the original students still there (but only 5 had been able to finish the Evans course). On the Job Corps tests, the average increase was 1.3 grade levels, with 16 who gained 1.5 or more and four who gained from 1.0 to 1.5 (average pre was 1.9, average post 3.2). There were only 10 post-test scores on the ITBS, but the pre and post averages (5.0 and 5.2) were not at all comparable to the Job Corps test. The program seems successful, and the evaluation report (by a local reading program coordinator) indicates respectable cognitive gains. The program was funded again in 1970-71 by Model Cities.

Just after the Clinic started in February, it was obvious that management support would be needed to plan the Continuation Grant Proposal and to do a turnkey analysis. Model Cities then provided the money to execute a new contract with Blaschke in February 1970. Blaschke provided valuable inputs to the Phase III planning, but did not have enough data from the first year to do a suitable turnkey feasibility analysis.

The second of the "Related and Ancillary" programs to be established was called "Operation Second Chance." Its stated purpose was to provide the instruction necessary (including reading and mathematics) to allow Model Neighborhood residents to take and pass the General Equivalency Degree examination for high school equivalency. It started in March 1970 as a performance contract between Dorsett and the city's nonprofit Manpower Development Corporation to give at least 95 Model Neighborhood residents GED-relevant instruction in two mobile trailers located near Model Cities Neighborhood Centers. The Citizens' Education Committee of Model Cities and Donnelly helped plan it, adapting many of the Title VIII provisions directly. The contract had a maximum payment of $37,000, using the $80/80 hr formula of the Title VIII contract for reading and math, and $200 and $100 bonuses for passing the GED (since the other contributing subject could not be measured directly). The contract ran until November 1970, and payments were scheduled to be made at a rate of 10 percent per month up to 85 percent of the contracted amount. Two dates were also specified when the rate could be negotiated up or down, based (in an unspecified manner) on test results. Also, 32 M86 Dorsett machines were purchased initially at $200 each.

The program started out with the difficult goal of providing basic education for adults, and it had many operational problems as well. The trailers were to be placed in the two neighborhoods that recruited (competitively) the most students. Even though about 170 were pre-tested, only a little more than 40 had signed up by the middle of the summer, and new recruiting was necessary. One of the lab directors said that community interest in the program was quite high. But there were many practical problems, such as mothers needing day care for children and people having to spend too many hours at the center. Many were also discouraged by the three hours necessary for the pre-test and never showed up after that.

Turning to results, the lab director said that only 6 had earned GEDs, but among other problems there were at least 15 students that were ready for the GED exam but were too young to take the test. They were largely high school dropouts, notably girls. Later, the monitor said that of the first 21 post-tested, there was an average reading gain of 1.5 grade levels and about 1 grade level in math. For the 40 recently tested, the scores were "a little lower." With these difficulties, contract payment provisions were renegotiated, the result being that Dorsett earned a respectable $14,000 on achievement, but only about $20,000 over all because so few passed the GED exam. Over all, then, Model Cities provided very necessary support to the planning and operation of the 1969-70 Title VIII program. They also funded several key expansions of the reduced Title VIII program, and thus kept alive the larger focus of an overall manpower education program as the setting for dropout prevention and academic remediation efforts.

CONCLUSIONS

Looking back on Texarkana in 1969-70 from the vantage point of the fall of 1971 and the perspective of a second year of performance contracting experience, we are struck by the extent to which the issues and problems that arose in Texarkana that year are still relevant.

The first in importance is testing. Not only are tests difficult to administer, but the need to define inadmissible test-teaching and to set up safeguards is essential.

A second problem is how to settle achievement payments when the conditions assumed in the contract do not apply. In the Texarkana case in 1969-70, the problem was that the evaluator decided that the achievement test data were statistically invalid. Other programs have encountered other problems; for example, classrooms were not ready in time to provide the contractor with the minimum number of days of instruction called for in the contract. The need for a fall-back system for contract settlement would seem to be a clear implication of the Texarkana experience, but it has yet to become a feature of performance contracting.

A third implication is that performance contracting creates a significant workload for the school district as well as for the contractor. Performance contracting, Texarkana shows, is not a matter of calling a contractor in and then sitting back to await evaluation reports. Considerable district inputs are required for a useful program. Even in Texarkana, where local managerial and analytical resources were augmented by contracts for management support, evaluation, and auditing, the program placed a considerable burden on the Texarkana school district management and required an office with several talented officials to oversee and direct the program.

The first year of performance contracting in Texarkana also indicated that questions of role definition will arise, especially when multiple contracts are involved. This problem came up in several forms. The specific responsibilities of the internal evaluator, the auditor, and the management support group made up one problem. Another was assigning the respective supply, procurement, and other logistics responsibilities of the school district and the contractor. Another was ambiguity in the responsibilities of the RLC personnel to the contractor and to the school district.[29]

A final implication of the program is that change is endemic to any performance contract. One of the admirable features of the Texarkana program is that it was planned for five years. Even if it had not been deemed necessary to terminate Dorsett's involvement, it would have been difficult to achieve the ambitious goals of the program in a year or two. In fact, it was possible to incorporate many lessons learned the first year into the second year of performance contracting in Texarkana.

A corollary to the flexibility entailed by a multiyear program is the desirability of having a source of supplementary funding, such as the Model Cities support, if one is pursuing such broad goals as those Texarkana outlined in its first dropout-prevention proposal.

[29] To cite a trivial example, for a time RLC teachers enjoyed soft drinks in the RLCs, while regular teachers were forbidden to take drinks into their classrooms. The RLC personnel were instructed to obey school rules.

III. THE TITLE VIII DROPOUT PREVENTION PROGRAM, 1970-71

THE PROGRAM DESIGN

Despite the difficulties attendant upon the test-teaching scandal, Texarkana not only continued the Dropout Prevention Program but expanded it and made some substantial changes. The major changes were a heightened emphasis on the dropout prevention goal and on the goal of introducing new educational processes and technology into the regular school program. This latter goal was strongly reflected in Texarkana's outline of its implementation strategy, reproduced in Fig. 2. The Dropout Prevention Program was to be divided into four stages spread over seven phases (each a school year). The stages were: Development (of curriculum), Experimentation (testing of curriculum in special centers), Demonstration (special turnkey classrooms), and Adoption (introduction of new curriculum into all classrooms). Eight subjects were scheduled through the four stages. The subjects scheduled for development and experimentation during 1970-71 were vocational education and consumer education, but they were later ignored because management was overloaded. Reading and mathematics were scheduled for turnkey demonstration.

This broad strategy is reflected in the organization of the project, charted in Fig. 3. The project was divided into four components: learning center, turnkey, counseling and guidance, and curriculum and instructional. The learning center component

Stage	Phase I 1969-1970	Phase II 1970-1971	Phase III 1971-1972	Phase IV 1972-1973	Phase V 1973-1974	Phase VI 1974-1975	Phase VII 1975-1976
Developmental stage (develop curriculum)	Reading, Math	Vocational Education, Consumer Education	Social Studies, Science	Humanities	Special Education		
Experimental stage (Learning Center)	Reading, Math	Vocational Education; Consumer Education; Reading; Math	Social Studies, Science	Humanities	Special Education		
Demonstration stage (Turnkey Class) Pilot Project		Reading; Math	Vocational Education, Consumer Education	Social Studies, Science	Humanities	Special Education	
Adoption stage (Adopt for entire school system)			Reading, Math	Vocational Education, Consumer Education	Social Studies, Science	Humanities	Special Education

Fig. 2—Strategy for implementing a model dropout prevention program

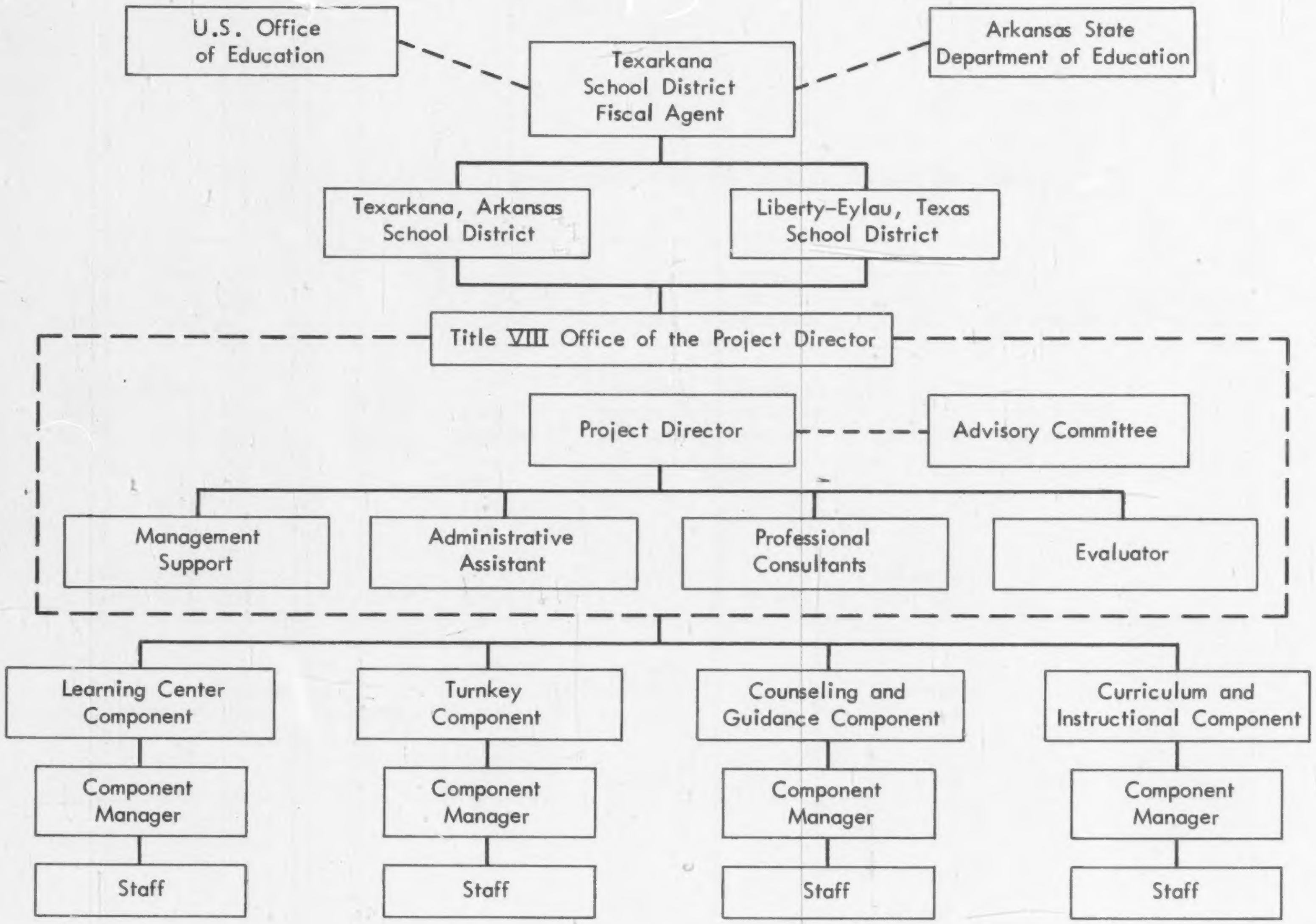

U.S. Office of Education
Texarkana School District Fiscal Agent
Arkansas State Department of Education
Texarkana, Arkansas School District
Liberty-Eylau, Texas School District
Title VIII Office of the Project Director
Project Director
Advisory Committee
Management Support
Administrative Assistant
Professional Consultants
Evaluator
Learning Center Component
Turnkey Component
Counseling and Guidance Component
Curriculum and Instructional Component
Component Manager
Component Manager
Component Manager
Component Manager
Staff
Staff
Staff
Staff

Fig. 3—1970-71 Project organization

comprised the LSC's activities. The turnkey component was to introduce learning center technology and processes into regular classrooms. The counseling and guidance component was responsible for working with potential dropouts to develop their self-esteem and aspirations. The curriculum and instructional component was responsible for curriculum redesign in English, Mathematics, and Vocational Education, and for teacher training and development in individualized instruction and contingency management.

The turnkey component evolved naturally from the 1969-70 program design. The addition of the counseling and guidance component reflected a decision to attack the problem of dropouts directly by working with them on career and personal plans and not to limit the attack to the indirect technique of improving academic skills. The final component reflected a desire to use the program to design a workable curriculum and to generally upgrade teaching skills.

A second change in the program between 1969-70 and 1970-71 was a reorganization of functions. The management support function, even though it occupies a separate box in Fig. 3, was in practice part of the internal evaluation function. Both the internal evaluation and most of the management support were provided during 1970-71 by the Region VIII center in Magnolia. The involvement of Education Turnkey Systems, Inc., whose president had been a prime mover in the project, effectively ended with the preparation of the continuation grant application to USOE in the early spring of 1970 and the new RFP in June 1970. Though not shown in Fig. 3, EPIC remained the program's educational auditor.

Development of a planning, programming, and budgeting system (PPBS) was also added to the 1970-71 program. A contract with Educational Consultants of Athens, Georgia, was awarded for management support for this effort (see Appendix I). Also, each component had an official responsible for it. Overall responsibility remained with the Project Director, Martin J. Filogamo.

A third noteworthy change in the program was that the objectives and payment provisions were no longer linked solely to norm-referenced test results. The RFP for the 1970-71 program stated the long-range goals of the program to be:

1. To significantly reduce the percentage of dropouts in the Texarkana and Liberty-Eylau school districts.
2. To increase academic achievement and skill development of students who are educationally deficient.
3. To increase the cost-effectiveness of the instructional program in the Texarkana and Liberty-Eylau school districts.

The RFP then stated that the contractor for the learning system component must guarantee that there will not be more than a 5-percent rate of dropouts from the program. The RFP also stated that standardized norm-referenced tests "if used alone" were inadequate, and that part of the payment to the contractor must be based on criterion-referenced tests.

The learning center component and the turnkey classrooms were to be embedded in the larger and more comprehensive effort. However, since this study is directly concerned with performance contracting, attention will be limited to the turnkey and learning system components, in that order. Both the curriculum and the counseling components languished because of pressing problems elsewhere, such as managing a new RLC program, keeping turnkey going, and managing the massive testing effort.

TURNKEY COMPONENT

The term *turnkey* comes from the construction industry.[30] When a utility plant or some other complex unit of construction is to be built, construction contractors will sometimes take complete responsibility for it from the start until the entire unit is functioning. They will design, construct, and equip the unit and insure that it is operating successfully before "turning the key" over to the buyer. The analogous operation in education is the development of a learning system by a private firm that tests the system in actual operation in a school district, gets it performing well, and then presumably turns it over to the LEA for in-house use. But transferring the technology and process-practices for a learning system is rather different from handing over the key to a construction unit, as Texarkana showed.

Plans for Turnkey

Even though the turnkey concept was to be the keystone of the original Texarkana dropout prevention program, the initial program documents said relatively little about it. In the Addendum (July 1, 1969) to its original proposal to USOE, reflecting accommodation to a severe budget cut, only two operational objectives bore on turnkey. The first was the training of 20 junior and senior high school teachers, working as part-time "consultants" to the contractor, to use the contractor's programs in their classrooms. This training was to be on the job rather than in formal workshops. In addition, turnkey might draw from the estimated 15-20 paraprofessionals who were to be employed by the contractor directly in the learning center (only 5 aides were actually used in 1970-71). The second relevant objective was to determine the specific costs and instructional time required to produce grade levels of achievement for students with a given profile. This was to have provided data for planning the turnkey phase and was stated as being the most important objective, requiring the most careful planning during Phase I.

---

[30] For more on the turnkey concept, see Education Turnkey Systems, Inc., *Performance Contracting in Education*, Research Press, Champaign, Illinois, 1970.

Little time was available for planning turnkey operations during the summer of 1969, which was filled with an RFP, proposal evaluation, hiring a project manager, and selecting a contractor. During the rest of 1969, attention was necessarily focused on getting the learning centers going. In addition, since no requirement was specified for Dorsett to submit the cost reports necessary to allow the evaluator to determine "cost per achievement gain," the monthly operational and cost reports never came in. Also, in the Final Evaluation Report for 1969-70, the evaluator noted that Dorsett had four working sessions with a "cadre" of 20 teachers, including curriculum evaluation, but the first meeting was not until January 20, 1970. Planned demonstrations of the centers by the teacher cadre were successful.

In February 1970, Model Cities agreed to supply the money to allow the project to contract with Blaschke again for badly needed management support in both operations and planning. A continuation grant proposal was due in April to USOE showing the Phase II plan, and a turnkey analysis was necessary to support the turnkey planning. A composite of the turnkey plan was laid out in the continuation grant and formalized in the evaluation design for 1970-71.

The overall purpose of the turnkey component was to transfer the techniques proven successful in raising reading and math achievement for potential dropouts into regular classrooms as a demonstration pilot program. There would be reading and math classes spread over the three junior and two senior highs. During 1969-70 many observers of the RLC wondered whether the students who left the center for the regular classrooms would not backslide into the same problems that originally led them to be assigned to the RLC. The turnkey classrooms were designed, in part, to solve this problem by carrying the RLC procedures into the regular classroom.

The target population would be all the Phase I participants in the Rapid Learning Centers (grades 8-12) who had gained at least one grade level in reading or math. It was expected that 174 students would qualify in reading and 129 in math. But these classes would also include regular students, both to be a model for their RLC peers and to familiarize some regular students with the program in preparation for full implementation for 1971-72. This decision was a significant modification of the turnkey concept, since many more variables were introduced than would have been if the classes had contained only students from the RLCs.

The Evaluation Design of June 30, 1970 contained a summary chart listing specific objectives for the turnkey phase of the 1970-71 program. Although this list set forth the basic structure of the program as it was to be conducted in 1970-71, a number of the statements were worded ambiguously and some of the objectives were unrealistic. These were later changed in the Mid-Year Evaluation Report of February, 1971. The following list sets forth the major specifications as they were first stated or later revised, if necessary.

The key objective for the program (at first ambiguously worded) was:

> The achievement level in mathematics and/or reading of at least 200 potential dropouts in grades 8-12[31] will be raised 1.0-1.9 grade levels in 140 days of instruction.

A curious statement was that:

> The cost effectiveness of student achievement in mathematics and reading will increase by 50 percent.

Apparently this was to be determined after the following objective was realized:

> To develop a performance budgeting system that will provide a cost efficiency ratio.

Added to this, the efficiency of the instruction was to be checked by determining whether

> . . . 75 percent of the students enrolled showed at least 1.0 grade level increase in mathematics and in reading in one year.

---

[31] Originally the spread was 7-12; the writer apparently forgot that no RLC students were in the 6th grade the preceding year.

The specification of procedures for student selection was also later revised:

(1) To identify all the target population eligible to participate in the Turnkey program as defined by the following criteria:

(a) Students in 1969-70 Rapid Learning Center program who gained one or more grade levels in reading comprehension and/or mathematics, and

(b) students outside the target population scheduled in the same classes as successful 1969-70 RLC students.

(2) To select from the target population a minimum of 150[32] students in mathematics and 150[32] students in reading to be enrolled in the Turnkey classes.

It is not clear whether the random selection was to be made from all of the students identified in (1) or only from the students identified in (1)(b). However, this was later clarified, as stated in the Final Evaluation Report for 1970-71, by simply deleting (1)(b). Even so, with only 145 students meeting criterion (1)(a), there was a shortage of turnkey students. These students were simply scheduled as evenly as convenient among the 15 turnkey teachers, with almost all classes coming from the low-ability track.

Other specifications are easier to interpret:

- Turnkey programs will be operating in a minimum of ten English and eight mathematics classes in grades 8-12.
- To select fifteen teachers and four aides to operate Turnkey classes in grades 8-12.
- To establish two exit testing dates . . . (January and May)
- To utilize equipment in Turnkey program with not more than 10 percent "down" time.
- To involve effectively a minimum of six groups in the planning and operation of the program.
- To develop and operate a student information system that provides data on number of dropouts, school absences, grade retention, and subject failures.
- English and mathematics teachers will be trained to operate Turnkey programs in Phase III.

---

[32] Revised downward in February from 250.

And, as a result of all this, not only would achievement scores go up, but:

- The dropout rate in grades 8-12 will be reduced to 5 percent.

It was unrealistic to expect the turnkey program to meet its basic goals (improved student achievement and lowered dropouts) as well as accomplish such sophisticated feats as the development of a student information system. It was particularly unrealistic in view of the budget available and the probability that the contracted program for the learning centers would again soak up most of the attention and resources, as it had done the preceding year.

Turnkey in Operation

The following material draws heavily on the Final Evaluation Report for 1970-71, notes taken from observations of the turnkey classrooms, and interviews with turnkey teachers and administrators.

The turnkey component was under the direction of Dr. Lewis Lemmond, who was formerly with the Liberty-Eylau schools. During 1970-71 he was employed by the Region VIII center (see Appendix G), which assigned him to Texarkana as part of its management assistance effort. The turnkey component received 16 percent of the budget for the total program.

There were 24 turnkey classes: 12 in math and 12 in English. There were also 15 classroom teachers and 5 aides, one for each of the 5 campuses involved (College Hill Junior High, Jefferson Avenue Junior High, Arkansas Senior High, and Liberty-Eylau Junior and Senior Highs. These classes served a total of 145 former RLC students. This was already considerably less than the 300-odd turnkey students implied in the continuation grant (if the target students were to be half of the turnkey population of 600) and quite a bit less than the 250 implied in the evaluation design for a population of 500 (step (2) in the procedures for student selection).

Students who had been in the RLCs during 1969-70 and who had improved by at least one grade level in either reading or math on the tests given in May 1970 were "in the turnkey target population," according to Lemmond. This meant that students well below normal grade level could be in turnkey classes. If a student had improved sufficiently in only one subject, he was very likely to stay in the RLC for the other subject. Also, we cannot be sure that all students who improved at least one grade level did, in fact, enter a turnkey classroom, rather than stay in an RLC or enter a regular classroom, because of the practice of basing student selection on the results of the invalid May test scores. There were no apparent provisions for retesting these students.

Beyond this, there was no special system for assigning students to classes, although Lemmond did imply that attempts were made to group students with similar gain scores. Most of the turnkey teachers interviewed, however, felt that the spread of capabilities in their classes was very wide. For example, in one 9th grade English class there were students reading all the way from 2nd to 9th grade levels, according to the teacher's assessment. One teacher also surmised that troublemakers were funneled into the turnkey class.

Each of the turnkey teachers was specially selected for the program by the building principal. The basis for selection was a set of guidelines provided by Lemmond that suggested desirable characteristics: empathy for students, ability to diagnose individual learning difficulties, and belief in the need for change. The turnkey "reading" teachers were former English teachers, as reading had not been previously taught at the secondary level. The teachers observed and interviewed were quite disparate in terms of their apparent ability to maintain control of the class (although this has not proved to be a strong factor in student achievement in other programs) and in their acceptance of the Dorsett machines. Almost all, however, had achieved at least a degree of individualization; despite the very late arrival of materials and wide ranges in learning capabilities, they were strongly committed to the benefits of the individualized approach.

Each of the turnkey schools had an aide shared by all the turnkey teachers, generally three. One teacher, however, who had to share her aide with three others, felt this was too many. We observed the aides to be very helpful and intelligent in dealing with the classes, substantiating the teachers' beliefs that aides are practically a necessity for such a program. Although no special training was provided for the aides, some had been involved in the Dorsett program the preceding year and vitally assisted the teachers in establishing the program.

Teachers were given a one-week training session, before school opened, in August 1970. A reading specialist from Liberty-Eylau conducted the reading training and a teacher from nearby Magnolia Jr. High, who had worked with the program in mathematics, conducted the math training. During the training, the teachers became familiar with the materials that would be available by grade levels (they had heard company representatives on June 17). For mathematics, these levels were keyed to the diagnostic test. The teachers went through the materials in reading, making up the concept hierarchy themselves and keying materials to the concepts they taught. They expressed enthusiasm about the training.

Further training was given in December. There was a two-day seminar on behavioral counseling techniques led by Dr. Ray Hosford of the University of California, Santa Barbara. The teachers appeared to be pleased, as indicated by a questionnaire, because they had been having difficulties in handling behavior problems. Additionally, there was a half-day training session on the use of the materials for the SRA Diagnostic Reading Laboratories. This session was delayed because the materials ordered in September did not arrive until December or January.

Apart from these sessions, the teachers had to rely on past education and experience to develop their teaching techniques. Most of the teachers who commented on the training felt that although the initial training was helpful, it was inadequate and there was not enough follow-through. It would also have been helpful to have training for the aides and to have opportunities to exchange views with teachers in the program at other schools.

Turnkey Classrooms

The turnkey classrooms, contrary to the original concept of turnkey, were not replications of the Rapid Learning Centers nor even of the materials and techniques used in them. Instead, certain regular classrooms (with desks in rows) were designated as recipients of some of the RLC alumni and of some materials and equipment similar to those used in the RLCs. Each, for example, had Dorsett M86 machines and programs, but these were used in only a few of the classrooms. For one thing, many of the graduates from the RLCs knew the Dorsett programs too well; therefore, new programs would have been needed to retain their interest. If Dorsett had stayed, he could have produced the needed programs. For another, most of the teachers did not know how to keep the machines in running order, and unreliability eventually put most of the machines out of commission. And many teachers were soured by the initial difficulty of getting tables built and outlets installed to handle the machines. None of the turnkey teachers used the extrinsic rewards of the RLCs, and no effort was made to have teachers replicate RLC procedures. Thus, Dorsett's system was not turnkeyed.

In reading, the SRA Diagnostic Reading Labs were used the most, supplemented by *Read* magazine and the *Reader's Digest,* the SRA Pilot series (advanced), and *English for Me* (programmed English). In one school all of the reading teachers used EDL materials made available by the Model Cities program in a reading lab. Turnkey teachers in math used SRA math labs, computation skills labs and puzzle boxes, Sullivan workbooks, and Job Corps materials. They also used regular texts.

The major difficulty with the materials was that they were so late in arriving that teachers could not individualize their teaching until after the first of the year. In the midyear evaluation report it was noted that the materials to be used in the turnkey classrooms were ordered before school started but did not arrive until just before Christmas. This could, in large part, have accounted for the evaluator's further statement that "Instruction is not individualized." Some kind of self-instructional materials are mandatory to achieve individualized teaching in a fairly large class with a wide spread in capability.

The same evaluation report also noted that the excessively late delivery of materials was "related" to "administrative problems":

> There is a lack of unity of purpose and philosophy among administrators of various levels within the school districts. This results in a number of problems, especially in decisions concerning the budget and expenditures of Title VIII monies.

Hence, as in the first-year program, lack of a strong focal point for the program severely hampered the turnkey effort.

Some turnkey teachers had set up their own classroom management schemes before school started but were unable to use them because the required materials were not available. They did, however, administer some diagnostic tests and tailor instruction to student capability as much as possible. After the materials arrived, it took a few weeks to get the individualized approach working, and by the time of our observations in May many of the teachers were operating individualized classrooms. Students worked independently, calling for special help where needed, and showed evidence of a responsible attitude toward their own work. But the teacher approaches were still diverse. In one class students helped each other; in one, the teacher would treat the class as a group if many students were having the same problem; and in one a teacher used student leaders to direct the groups. Most of the classes, however, did exhibit a much closer relationship between teacher and student than in the regular classes.

To further complicate the teachers' task, the selection and scheduling of students for the turnkey classrooms was not completed until nearly two months of the school year had elapsed. This came about because no one knew exactly which RLC students would be eligible for turnkey until the preceding June, and a great deal of rescheduling was required. This implies that the summer was essentially wasted and that the rescheduling did not get under way until school opened in the fall. There were also fewer former RLC students than planned; 185 were reported in the Mid-Year Evaluation and only 145 in the Final Evaluation, whereas 250 were expected.

A number of the teachers were intensely involved with the program. One continually pressured the administrators to obtain the missing materials, another sought specially programmed materials for her class. Frequently, teachers noted startling improvements in the attitude and behavior of individual students. Some teachers expected equally startling gains in student achievement (as much as three years) and were completely sold on the program.

The students, on the other hand, seemed to be less pleased. In May, the teachers said that many students thought of turnkey as the "dumb class" and some requested permission to leave. Teachers reported that students demanded traditional grades, rather than progress indicators—another evidence of their desire not to be specially singled out by the program. If troublemakers had, in fact, been put into the turnkey classes, it would not be surprising for students to feel stigmatized. Despite this, some of the students evidenced genuine interest in the materials and (in a few instances) the machines they had been working with.

Turnkey Achievement

The overall system-wide objective of a dropout rate of 5 percent or less in grades 7-12 was achieved; the actual rate was 4.3 percent compared with 8.3 percent the year before. No attempt was made to assess how much turnkey contributed to this common goal as compared with the Rapid Learning Center component. The favorable impact on the dropout rate again stands out, as in the 1969-70 school year, as the principal positive result, since the 1970-71 achievement scores were anything but encouraging.

The only specific measure of turnkey academic performance was the difference between the pre- and post-test scores on the ITBS (forms 5 and 6), but this test was given only to learning center students and thus to only those turnkey students that were also in the learning centers. For reading, this was about 45 percent of 111 turnkey students, and for math about 28 percent of 79 turnkey students. Because these are students who did worse than the other students in the turnkey program, since they were kept back in the RLC for one subject, this sample is probably biased toward too conservative an estimate of true gain from the turnkey classrooms.

Only 24 percent of turnkey students tested achieved or exceeded the objective of 1.0 or more years gain in Reading Comprehension, and only 55 percent achieved or exceeded 1.0 years gain as measured by the Total Arithmetic score. Also, 43 percent of the reading gains and 25 percent of the math gains were *negative*, suggesting that over a third of the turnkey students tested were doing a significant amount of guessing. But it is comparison with other groups of students that truly makes the turnkey academic results look bleak.

The control or regular group was limited to those students who were taking one RLC subject but not both, and were not in the turnkey program—or about 80 students in regular classrooms for reading and 80 for math. This limited design was presumably dictated by testing convenience. For each of the five subtests of the ITBS, the Final Evaluation Report presents tables of the three two-way comparisons between RLC/RLC students, RLC/turnkey students, and RLC/regular students.[33] For each comparison, the two groups were chosen to equate pre-test scores and IQ scores. This selection yields an N of only 18 for the turnkey students out of the population of 145, raising serious doubts about whether results from so small a sample can be generalized.

There were no significant differences (by t test) among the groups on the Vocabulary and Reading Comprehension subtests. Thus, 18 turnkey students did no better than 82 regular students, but 239 learning center students also did no better than the regular students. For arithmetic, turnkey students did significantly better (0.02 level) than learning center students on the Total Arithmetic subtest (an average of the other two arithmetic subtests), and noticeably but not significantly better than the regular students.[34] Thus, for this small sample, there is no demonstrated advantage of turnkey procedures over regular classroom procedures. However, with the large number of negative gains noted above for these gains on standardized test scores, the reliability of the results is doubtful. Validity is also a major question, but there was no attempt to provide any criterion-testing of the turnkey students. Thus, while decisionmakers have reasons for looking skeptically at turnkey classrooms, there is no clear basis for deciding what changes are needed.

---

[33] Roberts and Andrew, *The Texarkana Dropout Prevention Program Final Evaluation Report*, Region VIII Education Service Center, Magnolia, Arkansas, August 1971, pp. 73-80a.

[34] Ibid., p. 80b.

Turnkey Conclusions

The turnkey classrooms were different from the conventional Texarkana class, particularly after the special materials arrived in January. Four differences stood out: (1) more diagnostic testing, (2) more attempts to prescribe individualized material, (3) more material and more individualized materials, and (4) a more informal relationship between teachers and students. In many classes individualization has gone only part way, for reasons previously discussed. In short, while turnkey classrooms were different from the conventional Texarkana classrooms, they were also different from either of the learning systems used in the RLCs. Since no attempt was made to turnkey Dorsett's materials and procedures as a complete system, and since Dorsett had no role in implementing the turnkey phase, he could not make the program modifications and provide the extensive teacher training that would have been required to integrate his system into the regular school program. There were also doubts about the effectiveness of the Dorsett materials, but no solid evidence pro or con. It was accordingly decided to use Dorsett machines as only part of the program, and to have other materials provided by the component manager organized into a curriculum structured according to behavioral objectives worked up by the teachers themselves.

Thus, the turnkey effort now looks like one of the many compensatory education projects of the last few years. However, unlike the most successful compensatory projects, there was little intensive effort to give continuous in-service training. With no forum for common problems, teachers did the best they could, and the results depended on the quality of the teacher (or sometimes the aide) alone. The unpredictable but severe lack of materials for the entire first semester made individualizing instruction very difficult. Add to this problems of over-large classes at the beginning, and it is amazing that some of these classes finally did work well.

Not foreseeing the importance of regular in-service sessions was probably due to lack of experience of the component manager with similar projects and to the difficult logistics of working with five schools (four widely separated). Additionally, the attention required for resolving the Dorsett contract and selecting a completely new contractor took much management time from the turnkey effort and sharpened the difficulties arising from diffused responsibility and lack of a strong focal point for decisionmaking for the program as a whole.

Dropouts declined, students seemed to learn, there were often fewer discipline problems at the school, many teachers liked the individualized approach, and the children responded to individual help. However, the small sample of students tested did not meet the objective of 1.0 or more years gain, and they did not score significantly better than an equated group of regular students. There are serious problems of statistical reliability and validity, but the achievement results are not encouraging.

The turnkey program also failed to meet several other objectives. There was insufficient testing for a true evaluation of turnkey achievement, and no cost data were collected at all. Also, due to time and scheduling problems, no one but the turnkey teachers themselves and the school counselors received training in individualized instruction and behavior management. This places quite a burden on the training function in trying to expand turnkey in 1971-72.

In sum the turnkey classrooms did have a different curriculum from the conventional Texarkana classroom. Performance contracting did turn out to be a change agent in Texarkana. The educational process implanted, however, is far from the advanced technology, advanced classroom-management techniques, and nongraded individualized systems that many people hoped performance contracting programs would introduce into standard classrooms.

RAPID LEARNING CENTER COMPONENT

The RLC Plan

The general objectives were to reduce the percentage of dropouts significantly and to provide more efficient reading and math instruction in grades 7-12. The specific project objectives were:

- The math and/or reading achievement levels of 300 potential dropouts would be raised by 1.0 to 1.9 grade levels in 140 days of instruction;
- The dropout rate in grades 7-12 would be reduced to 5 percent;
- The cost-effectiveness of the system would increase by 75 percent in student reading and/or mathematics achievement;
- 22 teachers (English and math) would be trained to operate the RLCs;
- A public information system would be established serving essentially all interested or affected groups.

There were also some 16 process objectives serving as guidelines to meeting the goals above. As with the turnkey objectives, the achievement and cost-effectiveness objectives were ambiguously worded initially, and the overall goals were perhaps overly ambitious.

RFP and Contract

Educational Developmental Laboratories, Inc., a division of McGraw-Hill, was chosen on the basis of a competitive bid to be the LSC for 1970-71. The contractor selection form attempted a quantitative assessment of each potential contractor and his system, whereas the selection form in 1969-70 had essentially been a checklist of points from the RFP. The RFP that Texarkana submitted to prospective LSCs in the summer of 1970 differed from its previous RFP in two important respects. First, the evaluation design and data reporting requirements were outlined. Second, the RFP stated that performance would be measured by the results of standardized tests and also by the extent to which program objectives were realized. The proposed payment arrangement flowed from this approach. The RFP stated that 75 percent of the payment would be based on standardized norm-referenced tests and 25 percent on the achievement of interim and final objectives. The RFP also stated that the contractor must be prepared to guarantee that the dropout rate would not exceed 5 percent.

The contract payment provisions were derived from a procedure EDL proposed, based on estimated project costs of $65,788. This was divided into two parts. One part was called the Fixed Charge and set equal to $39,012. This sum was to be paid to EDL in two equal installments, at the time the contract was signed and in December 1970.

The remaining part, $26,776, was to be held in escrow until the student achievement results were available and the contract was settled. All or part of this sum would go to EDL depending upon a penalty-bonus calculation based on a point system. (The formula is in the contract in Appendix F.) This formula multiplies by 4 the number of students that qualify for the achievement guarantee in order to compute the total number of points to be allocated. This total was to be divided into $26,776 to get the dollar value of a point. A point calculation was to be made for each student. No points were to be assigned for satisfactory completion (scores between 75 and 85 percent) of the criterion-referenced tests and for reading and mathematics achievement growth in the range of 1.0 to 1.9 years. If the student norm-referenced achievement gain were less than 0.9 in mathematics or reading, 3 penalty points for each subject would be assigned; likewise, if growth were greater than 2.0 years, 3 bonus points would be assigned for each subject. Scores on the criterion-referenced tests of less than 75 percent would earn 1 penalty point per subject, and scores greater than 85 percent would earn 1 bonus point per subject.

To compute EDL's payment, one would begin with the $26,776 and subtract the number of penalty points multiplied by the value of a point. He would then add the bonus points multiplied by the value of a bonus point. If more bonus points than penalty points were earned, EDL would receive $26,776 plus a token of $1.00 for each student with exceptional performance.

EDL's response to the Texarkana RFP proposed not to constrain the total bonus it could receive. The final contract, however, included the constraint, which gave Texarkana more assurance about the maximum payment it might have to make. Also, EDL had proposed earlier to accept penalty points for all dropouts, including dropouts within the target rate of 5 percent. The contract, however, merely stated that EDL would be "responsible" for dropouts after the first two weeks and payment was not linked to the dropout rate. What this responsibility entailed has not been spelled out.

Rapid Learning Centers [35]

EDL equipped five centers for grades 7-12 under the dropout prevention program and one center for the 6th grade at Washington Elementary under the Model Cities program. This last center will be discussed later. There were 426 students in the 5 dropout prevention centers and 110 at Washington School's sixth grade. The trailers and classrooms that had been modified to Dorsett's plans were used with only slight environmental changes. The instructional program was built around the EDL Learning 100 system of hardware-intensive instruction, using very detailed materials. The system used individualized or small-group instruction without extrinsic motivators or unusual student incentives.

Each center had a teacher and an aide (except for Washington, which had two teachers and an aide), and the original teachers and aides were given 40 hours of special instruction. Although teachers and aides were on the EDL payroll, their salaries were determined by the Texarkana School District salary schedule and they were subject to the policies and administration of the LEA. EDL was represented by its Component Manager, Mr. Edward G. Miller, a former Texarkana junior high school principal.

---

[35] See also Edmund Zazzera, "A Contractor's Viewpoint," *Compact*, Vol. 5, No. 1, February 1971, pp. 13-16, for more detail on the centers.

The target population consisted of students with IQs greater than 75 who were two or more grade levels behind in reading and/or mathematics. Students could be scheduled into the RLCs for an hour a day per subject in either or both subjects. Twenty students at a time were scheduled into the centers. One of the project personnel estimated that between 50 and 60 percent had been in the centers last year.

RLCs in Operation

In general, the centers have operated as smoothly as most special programs, and particularly well considering the handicaps attendant on discontinuing one contractor's involvement and bringing another in on relatively short notice. The start of the 1970-71 program was delayed by at least two months by this change of contractors.

There was teacher turnover. The EDL system is quite challenging—as were many of the students in the centers. Five people out of the original 13 were replaced (four teachers and one aide) and five new people trained on the job. Interviews at the centers indicated that this training was considered very effective, and the replacements all seemed above average in ability. The discipline problems at one of the high schools ended very quickly, and all the students improved their work. Miller commented that the group had stabilized most satisfactorily, and he felt this group was well prepared for next year's program.

Student selection and scheduling was a problem. The lack of good, easily accessed records of IQs and reading test scores made it difficult to determine which students should be assigned to the centers. The coordination of center attendance with other class schedules was also a problem. At the high school level, students have some flexibility and choice about schedules so the scheduling difficulty was exacerbated. The result was that, as the evaluator put it, for several weeks there was a "fluid" population in the centers. Student selection and scheduling seems to be an endemic problem with most performance contracting programs. If great attention is not paid to it, a significant number of scarce teaching days can be lost.

Testing was also a problem. The evaluator noted that the conditions under which the standardized norm-referenced tests were administered were far from

67

ideal. There was a lack of proctors, students did not have enough test-orientation, and the switch in the contractor and a decision to use a different form of the ITBS delayed test administration. And as the evaluator noted, the testing required a great deal of management time. Again, such problems seem to be common throughout performance contracting.

The impressions we formed on seeing the centers in operation were almost all positive. In the five (of six) centers visited at least briefly, the teachers were all well organized and had pleasant or warm relationships with the students. This was also true of most aides. Quite a few aides taught the reading and math classes alternately with the teacher during the day, an indication of their competence. Attendance in the classes observed was always well below 20 (on one day, one class had only 6), although some teachers mentioned having a class or two that were nearly full. The machines worked most of the time. They were tended by a maintenance man, and the variety of activities in the EDL program made it easy to program around machine failures. EDL strongly urges that the teachers be approachable by the students, and this practice seemed quite successful. Several teachers commented on changes in work rate and behavior they noticed after they had continually encouraged students and listened to their problems. Another indicator of this concern for students is the approach to the machines; one teacher told her students at the beginning, "We have these machines because no one person knows everything, and they'll help us help you." Naturally, some students work rather slowly, but all could collect and set up their materials for the next step, and they worked throughout the period. The evaluator reported that "some" students felt the centers were "just for dummies," but we did not hear about such reactions in our teacher interviews. In sum, one could guess that this was in fact a system that had been used in many other places and shaken down. There were curriculum weaknesses, especially in math, but that was also a much newer area for EDL.

RLC Achievement

As noted in the section on the turnkey phase of the program, the primary objective of lowering the dropout rate to 5 percent or less for grades 7-12 was achieved. Since the learning center component involved 426 of the total of 505 students, it probably deserves most of the credit for this achievement.

By contrast, the performance on standardized tests was dismal, raising doubts about the assumed relationship between improved academic achievement, as measured by norm-referenced tests, and dropout prevention. The ITBS Forms 5 and 6, respectively, were administered as pre- and post-tests to 251 students for reading and about 261 for math (some students, of course, took both, so the total is greater than 426). The evaluator noted that few students were eliminated from the program for reasons other than dropout, so the sample tested is essentially the entire learning center population.

Only 29 percent of the RLC students achieved or exceeded the objective of 1.0 or more years gain in Reading Comprehension, and only 25 percent achieved or exceeded 1.0 years gain in Total Arithmetic (the two subtests on which contract payment is based, although the other subtest results are similar). The mean gains (computed after the fact for the cost analysis) were 0.48 years in reading and 0.31 years in math including the sixth grade as well as secondary school students (7-12). This is a far cry from the major gains forecast by the contractor, and raises doubts about whether EDL recovered all its costs. Also, 41 percent of the Reading Comprehension gains and 33 percent of the Total Arithmetic gains were negative, raising serious questions about the amount of guessing and therefore the reliability of the testing. This seems to be an endemic problem in using standardized tests for low-achieving populations.

To make matters worse, the RLC students showed no significant differences in gains over either the 81 "regular" students or the 18 turnkey students. As the evaluator summed the results, "The desired achievement gain in reading and mathematics was not accomplished by the performance contractor, EDL/McGraw-Hill."[36]

There was a criterion-referenced testing program as well in 1970-71, allowing a comparison of results on criterion and norm-referenced tests. However, the criterion-referenced testing program encountered severe difficulties. The contract called for EDL to submit, within 30 days of the signing of the contract, a detailed list of performance objectives and a pool of criterion-referenced test items. For each performance objective, at least five questions had to be submitted. Meeting the time requirement turned out to be impossible; EDL did not finish the task until January.

The original idea had been to administer four tests and utilize pre- and post-test scores, but the difficulty in obtaining test questions ruled this out. However, since the EDL contract based the 25-percent criterion payment only on the final criterion tests, this was not a serious problem for contract settlement purposes, but it did ignore the important question of *gains* in performance.

---

[36] Op. cit., p. 116.

Two test dates were scheduled, January and May, with payment to EDL based only on the May results. After EDL submitted the five questions per objective to the evaluator, he constructed the January test by sampling items for almost all objectives. The only objectives ignored were those involving teaching machine work, for which it was not feasible to test students. The wording of the objectives required that all instructions be given orally for objectives below a particular level in the curriculum. It was decided to use the laboratory directors as test administrators, and to test all students (grouped by level) in the same half-day. Some of the teachers have given vivid accounts of this experience. With no chance for field trial, the test was far too long; reading often took the full morning (2-1/2 hours) and math another hour. Not only were there too many items, but having to give oral instructions to the group required waiting for the slowest child on each item. The students were very tired by the end. Some instructions were unclear, and teachers had no opportunity to resolve ambiguities because they had not seen the test before giving it.

Because of these difficulties, it was decided to treat the January test as a trial run, and to construct a much shorter test for the beginning of May. This time, with many fewer items available from the contractor, the evaluator decided merely to sample the objectives covered, with a few items per objective. With a shorter test, it was possible to administer it more than once at a given level, and thus use project personnel as test administrators. In May, there was a preview session for the administrators, and the testing went off with barely a hitch.

The results were in sharp contrast to the scores on the norm-referenced test. About 78 percent of 336 students (including Washington sixth-grade students) tested in reading and 66 percent of the students tested in mathematics correctly answered 75 percent or more of the objectives tested. However, the evaluator pointed out that the test was too easy, because it sampled only a few objectives and took only about an hour to administer. Further, with only a sampling of objectives, he noted that reliability was worse than for a standardized norm-referenced test, and the content validity was highly questionable. He recommended that criterion-referenced testing should be made more comprehensive and should be more integrated with the instructional program.[37]

Again, Texarkana experience is in accord with the experience in other districts.[38] Developing criterion-referenced tests is back-breaking work, and there are

---

[37] Op. cit., p. 57.

[38] See particularly Polly Carpenter, *Case Studies in Educational Performance Contracting: Norfolk, Virginia*, The Rand Corporation, R-900/2-HEW, December 1971.

70

as yet no data on the reliability of test items. Attempting to test all students and all objectives is so monumental a task that some sampling procedure, perhaps as a part of the normal instruction, seems the only feasible approach. This makes achievement measurement depend on careful statistical computations. In short, the criterion-referenced testing procedures are only now being developed; the state-of-the-art leaves much to be desired. Nevertheless, such tests can be more valid measures of the short-run effects of instruction. Their relation to longer-term goals has not been explored.

RLC Program Cost

The Addendum to the 1970-71 Final Evaluation Report provides a rough estimate of the cost-effectiveness of the learning center program compared with regular classrooms. The unit of comparison was cost per grade-level increase. Before reporting these comparisons for reading and mathematics, we should note several deficiencies. First, there is no mention of the test used to compute gain scores for the regular students. One can only assume that the standard district tests (SRA and ITBS) were used, raising a serious question of the comparability of the gain scores between regular and learning center students. Next, no supporting resource and cost data are presented to indicate how the total program costs were computed. The resources shown in Table 4 represent our guess as to the components of the learning center program, but do not include supervision cost for either LEA or LSC, and do not include other elements relevant to EDL's program cost. The reasons for including or excluding a given resource are crucial to determining the adequacy of a cost analysis, and their lack is a serious omission. Finally, there is no indication of what kind of cost is being computed, i.e., how much is fixed and how much is variable with the number of students, and how much is acquisition cost versus operating cost.

Nonetheless, we report the Addendum costs since they are the only ones available and were in fact used for decisionmaking by Texarkana. It can be seen from Table 5 that the learning center program uniformly cost *more* per grade-level increase than did the regular program. But note also that the learning center population consists entirely of low-achievers, while the regular population has the full range of ability. Thus, it is not clear that a comparison of costs for the regular and compensatory programs is relevant. It would be ideal if we knew the average cost per grade-level increase for regular students of comparable ability to the learning center students. However, the cost differences are so large except for secondary

Table 4

PROGRAM AND RESOURCE INFORMATION FOR 1970-71

Characteristics of students	Grades 7-12; educationally handicapped (at least 2 years below grade level) IQ at least 75
Program scope	
Number of students[a]	251, reading; 261, math
Class time	1 period math, 1 period reading
Class size	20 students per classroom area
Facilities	
Space	4 trailers, each 900 sq ft; 1 classroom 1000 sq ft
Utilization	100% (6 hours a day)
Furnishings	Desks, carrels, carpet, air conditioning
Staffing	
Certified teachers	1 per center
Special teachers	0
Paraprofessionals	1 per center
Other staff	Project manager
Equipment	EDL Aud-X, Tach-X, Controlled Readers, Flash-X
Materials	Filmstrips, cassettes, cards with magnetic strips
Pre-service training	40 hours per teacher and aide
In-service training	No formal training
Other support	None
Incentives	None

[a] Model Cities funded 110 6th-graders for the same instructional program, giving a total program of 395 students.

Table 5

COSTS PER GRADE-LEVEL ACHIEVEMENT: LEARNING CENTERS VERSUS REGULAR CLASSES

Grade	No. of Students	Avg Grade-Level Increase	Total Cost	Avg Cost per Student	Avg Cost per Grade-Level Increase	Avg Cost-Difference per Grade-Level Increase
Reading						
Secondary (7-12)						
Learning Center	251	0.51	$ 62,735	$249.9	$493.93	+$ 28.53
Regular Program	1641	0.27	206,646	125.9	465.40	
Grade 6						
Learning Center	89	0.34	19,458	218.6	630.11	+ 535.97
Regular Program	520	0.76	37,206	71.6	94.14	
Mathematics						
Secondary (7-12)						
Learning Center	261	0.28	45,020	172.5	728.81	+ 366.70
Regular Program	1641	0.35	206,646	125.9	362.11	
Grade 6						
Learning Center	46	0.45	12,589	273.7	614.99	+ 508.20
Regular Program	520	0.67	37,206	71.6	106.79	

SOURCE: Taken from the Addendum to the Final Evaluation Report, August 1971, pp. 2-3.

reading that it is quite likely that much a comparison would still show that the learning center was more expensive per grade-level increase. The secondary reading cost for the learning center looks like a very favorable investment for an underachieving population—that is, until we look closely at the average grade-level increases given in Table 5. It is quite unlikely that the 0.27 listed for the entire secondary English student population is accurate, and the 0.35 for mathematics is not much more convincing. If they are accurate, then the reliability and especially the validity of those standardized tests are very questionable.

In sum there is again little information that a decisionmaker can use with confidence. However, the costs of the Texarkana program expressed on a grade-level increase basis is not particularly attractive.

RLC Conclusions

The dropout rate was lowered from 8.3 percent to 4.3 percent, well surpassing the primary program goal of a reduction to 5 percent. However, with more than half the students gaining less than 0.5 grade levels in all areas, and a large number of students apparently guessing on the norm-referenced tests, it would be rash to attribute the difference in the dropout rate to improved academic performance.

Academic improvement of 1.0 grade levels or better was also a goal, so the failures of two years of performance contracting to achieve these results could not be ignored. Texarkana therefore accepted the evaluator's recommendation that the LEA operate the learning centers instead of contracting with business firms. It is hoped that the center operation will have more teacher and administrator input and support in the future program years, and that these changes will lead to better results. The first attempt to provide a cost analysis—drawing on contract support —did not furnish the best basis for desisionmaking. Testing remains another problem area. Even with one year's experience, the testing program still was not adequate in the second year.

Attempting criterion-testing took valuable effort away from improving the reliability and validity of norm-referenced testing, even though the normed tests have inherent defects.

Finally, far too much was attempted for the numbers and experience of the available staff. Most attention went to the performance contract program to the exclusion of turnkey and other components. Perhaps this was the major reason that learning center achievement received most of the evaluation attention, while turnkey achievement, of potentially greater significance to the district, received less.

Yet the end products of attempting such ambitious goals are likely to be far more revolutionary than they would have been under a cautious choice to cling to evolutionary growth under Title I and small-scale innovations. In some form, individualized learning management systems, program budgeting, criterion testing, and a student information system have all taken root. And curriculum revision, integrated vocational education, and individualized counseling are still included in the goals.

MODEL CITIES SUPPORT

The 1970-71 Model Cities programs were largely designed at the time of the Continuation Grant Proposal in the late spring of 1970. There had been a desire from the first year to try out performance contracting at the elementary level. This desire stemmed from a belief that dropout prevention would be more effective if remedial academic work started earlier. Supporting this expanded effort was a redesigned continuation of the Reading Clinic Program; and of interest in its own right was a turnkey version of the adult GED program.

The first program was an extension of the main performance contract to an estimated 250 sixth-graders (who had the same qualifications: two grade levels behind and IQ of at least 75). This program was specified in an Addendum to the RFP. The only difference from the main contract was a different cost-reporting format for Model Cities. Otherwise, EDL (as it turned out) was to use its Learning 100 program and its Sullivan math in the two classrooms refurbished at Washington Junior High last year (but now changed to Washington Elementary, an all-sixth-grade school).

As explained above, there had been two changes of teachers, but by May they had settled in very well. They set up one classroom as the reading lab and used the other for math, with the aide assigned to the reading lab. The class sizes observed were typical of that center, with 12 in math and 13 in reading. In reading, 8 of the students were only at readiness level and required constant help. Two students at the fourth reading level who were making rapid progress also needed attention for supplementary work. In math, the students ranged from books 1 to 7 (addition to fractions), with book 5 encountered most frequently. Candy and chewing gum proved to be effective motivators for slow or difficult students. The reading teacher was pleased with the clear progress the new materials seemed to promote as compared with her recent student teaching experience. She noted that most other Washington teachers are in favor of the program, since they know they cannot help the slow students within regular classes. Science teachers and others say they have noticed definite progress.

The second program was a continuation of the first-year Reading Clinic, but not subcontracted by the school this year. A brief visit in May 1971 elicited the following information. The clinic operated with one white teacher (formerly a home economics instructor) and one black aide in a science lab room in the Washington sixth-grade school. The program was designed for 60 students in five classes of 12 each, but the class observed that day had only 5 students.

The materials used most were the EVCO Touch and Talk series from the Modern Methods of Instruction company. The class also used some of the BRL Sullivan materials. The materials initially provided were too elementary according to the teacher, but nothing supplementary was available until near the end of the year, when the Sullivan materials and some others were made available. In the meantime she had borrowed materials from other teachers and made do with what she had.

She stated that the children quickly spaced out in the materials so that it was easy to provide individualized lessons with the available materials. The group also quickly divided into sets of interested and uninterested students. She had made use of some of the teaching machines. At first the children found it exciting to work with them, but shortly took them routinely. She felt there was a good spirit in the class but there were some problems with some chronic absentees.

Of the initial group of 50 pupils, 6 of the faster students had been returned to the regular classrooms. She surmised that a few of her poorest students had been recommended for the program by teachers who wished to be rid of them. She administered a number of diagnostic tests. For example, at the start, her students scored on the Botel tests from 0.1 of the first-grade level to the 2.3 grade level. Those few students at or above the third-grade level were released (presumably into the RLC). Her classes were due for post-testing the following week and she was confident of progress, but did not mention the criterion she would be evaluated on.

The third program was a novel extension of the Dorsett GED effort that ended in December 1970. Significantly, the "Second Chance" GED program was then taken over in January 1971 by the Manpower Development Corporation in something very close to a turnkey fashion. MDC hired new staff and strengthened the curriculum by adding some new materials. In response to an evaluation report prepared by Blaschke, MDC reduced entrance-testing, gave cash incentives to students for hourly attendance and for passing the GED, concentrated on residents old enough to take the GED, and developed an operations manual for the centers. This new program was operated from January 1 to July 30, 1971, and initially enrolled 89 neighborhood residents. After the pre-test, 40 were assigned to the reading and math remedial work, and 48 went into the GED preparatory curriculum.

The program was very successful, with 34 of the 48 students earning GEDs by the end of July. Arkansas requires a minimum of 120 hours instruction before the GED exam may be taken, but the program students needed an average of only 56 hours, with a median of only 25. Results for the 18 students in reading and math that could be persuaded to take both pre- and post-tests were also impressive: the average gains were 1.8 years for reading and 1.4 years for math. This success was obtained in an overall average of 67 hours of instruction, using a system of completely individual scheduling of time spent at the centers. Despite this success, the school board did not vote any funds to transfer the program to school sponsorship, so Model Cities was forced to keep it as an experimental program.

Beyond these major efforts, Model Cities also filled in some important Title VIII program deficiencies. One example was funding a training session at College Hill Junior High for the turnkey teachers to help them master their newly received individualized materials. This was paralleled by a Title VIII funded turnkey training effort at Liberty-Eylau Junior High.

The most recent Model Cities assistance consisted of providing money to the Title VIII project to contract out the development of a modest PPBES for use in 1970-71 and thereafter (the contract is in Appendix I). Model Cities was also heavily involved in the program design for the third year (this program will be described below).

In conclusion, the availability of Model Cities funds has permitted Texarkana to avert some serious crises. It also permitted Texarkana to do some program expansion that allowed them to coordinate their dropout prevention efforts with school and community needs.

IV. FUTURE PLANS

A COMPREHENSIVE APPROACH

After two years of hard work and massive experimentation, Texarkana is trying once again to implement the kind of broad approach to dropout prevention envisioned in the original preliminary proposal. The objectives and components outlined in Table 6 are a good illustration of this scope. The programs directed at dropout prevention are to be a mixture of academic remediation, academic curriculum reform, instructional method reform, vocational orientation and training, and personal counseling. These efforts are to be supported by programs that remedy student needs interfering with performance (health, welfare, psychiatric), that provide a basic student data information system, and that organize and process evaluation data by programs so that they may be evaluated against each other and against regular school programs (the PPBES system).

The vocational courses, the training of school personnel in PPBES, provision of peer tutoring and sponsorship of intramural athletics, and specific assistance to students with nonacademic needs are all new process objectives compared with last year, but they have all clearly evolved from previous efforts. The Texas schools have had state-supported vocational programs for some time, and Model Cities funded an evolving vocational program for two and a half years to help Texarkana, Arkansas, develop capability for a state-funded vocational program that started in 1970-71. The superintendents in both districts, with the stimuli of the Title VIII and Model

Table 6

OBJECTIVES OF THE TEXARKANA PHASE III PROGRAM

PURPOSE:

The Texarkana Dropout Prevention Program, Phase III, is designed to accomplish a fourfold purpose:

1. To reduce the dropout rate in the Texarkana and Liberty-Eylau School Districts,
2. to assist the potential dropout to be successful in school,
3. to help the potential dropout to like school, and
4. to demonstrate a model dropout prevention program that might be implemented in any school.

METHODS AND TECHNIQUES:

To accomplish the above objectives, three components will plan, initiate, administer, and evaluate the following activities:

Curriculum and Instruction Component:

1. A vocational orientation course will be offered for all 9th grade potential dropouts.
2. A vocational exploratory course will be offered for all 10th grade potential dropouts.
3. Four hundred potential dropouts will be provided with individualized instruction in reading and/or mathematics through a performance contract with a private industrial firm.
4. A thorough curriculum study will be made of the offerings in mathematics and English in Grades 1-12.

Training and Supervision Component:

1. English and mathematics teachers will receive training in the techniques of individualizing instruction.
2. English and mathmatics teachers will receive training in behavioral management techniques.
3. School personnel will be trained in program planning, budgeting, and evaluation.
4. Counselors will be trained in behavioral counseling techniques.

Pupil Personnel Component:

1. Provide group activities such as peer tutoring and intramurals for potential dropout students.
2. Develop a comprehensive information system.
3. Assist students with such special needs as health, welfare, psychiatric, etc.
4. Help students in the adjustment process by providing comprehensive guidance and counseling services for the potential dropout and his parents.

SOURCE: *Dropout Prevention Program (Title VIII, Section 807, ESEA) Formal Proposal*, Texarkana Independent School District, No. 7, Texarkana, Ark., April 30, 1971.

Cities programs, have made strong efforts to coordinate their vocational and academic programs. With the expansion of the dropout prevention program this year, the City is emerging with a comprehensive and coordinated program. The PPBES system was designed last year, and the stress is on training the users this year. On special needs, the health personnel operate from the same building as the Title VIII program, and there has been informal coordination, with Model Cities helping in such areas as welfare and mental health.

Many of last year's objectives did not get much attention from the overloaded staff, so that teacher training and support for counseling to students and their parents will be essentially new. The natural focus of interest, therefore, is on how things will be handled differently in 1971-72.

THE ART OF THE PRACTICAL

The overall product objectives and their performance criteria are:

1. The students who are potential dropouts in the Texarkana and Liberty-Eylau secondary schools will respond positively to the dropout prevention program as indicated by a reduction in the percentage of those who drop out of school. The minimum acceptable criteria of percent of dropouts during the 1971-1972 year will not be more than 5.0 percent for the 1969-1970 school year.
2. During the 1971-1972 school year, the students participating in the Title VIII project will have successful achievement experiences as indicated by: (a) 75 percent of the group earning one or more grade level increase in reading and/or mathematics on a nationally accepted *standardized* test; (b) 75 percent of the group having at least a "C" average in all subjects; and (c) 75 percent of the group achieving at least 75 percent of the objectives measured by criterion-referenced tests.
3. During the 1971-1972 school year, the participating students will increase their positive attitude toward school as indicated by (a) their monthly average daily attendance rate equaling or exceeding the monthly average daily attendance rate of all the students reported in the official register for that building; (b) a mean gain of 30 points on the *School Sentiment Index;* and (c) at least a 75 percent increase in the number that aspire to complete

80

high school as recorded on the *Aspirations of Grade Level Completion Test.*

4. The Title VIII staff, in coordination with the school administrators in the participating school systems, will demonstrate an effective model dropout prevention program as indicated by: (a) achieving objectives 1, 2, and 3, and (b) the cost benefits for the additional students retained in school, in terms of expected lifetime earnings, will be greater than the operational costs of the Title VIII program.[39]

The main objective is hard to interpret, but was later clarified to be a dropout rate that is 20 percent less than that of 1970-71. The second objective is quite demanding for the target population on the standardized tests and the grade average, but conservative on the criterion tests. The attendance objective is highly relevant, and the aspiration level seems at least useful. The cost-benefit measure is important to include, but this is not very realistically defined.[40] Indicative of project cost is the expansion of the proposed budget to about $417,000 as part of the planned effort to spread successes more widely in the schools this year (last year's projection was for $550,000 this year and about $1.9 million overall).

This increase reflects a combination of maintaining old areas but narrowing their focus and of trying the new objectives noted above. Looking at the program summary chart (Table 7), one sees that College Hill Elementary has substituted for Jefferson Avenue Junior High of last year, reflecting a greater effort at the elementary level this year to avoid later academic deficiencies—a very desirable goal in its own right. The turnkey, now aptly renamed simply "individualized instruction," is concentrated in the Arkansas district alone and in only two schools (down from the five, in both districts, of last year). Combined with the emphasis on continued training of math and English teachers, this intensified effort seems to have a much better chance of paying off. The proposal is silent on the question of what individualized materials and methods will be used, but does say that the EDL techniques will be used everywhere they are "appropriate." The rumored "turnkey" purchase of EDL

---

[39] *Dropout Prevention Program,* pp. 95-97. (See footnote to Table 6.)

[40] The cost-benefit measure looks sophisticated at first glance, but is misleading. In the first place, we doubt that anyone really knows what the return to schooling in Texarkana is in terms of lifetime income. In the second place, since at most 17 percent of the students would have dropped out without the program, the program is "saving" only 12 percent of all students for one additional year. Presumably, then, only those 12 percent could expect additional lifetime earnings because of the program. Third, the school provides the students with much more than the dropout prevention program. These other costs should somehow be considered. Finally, the usual charge that education contributes more to a person's life than increased earning power can certainly be leveled at this computation.

Table 7

PROPOSED TITLE VIII PROGRAM FOR 1971-1972

	COLLEGE HILL ELEMENTARY					WASH-INGTON	COLLEGE HILL JUNIOR HIGH			ARKANSAS SENIOR HIGH			LIBERTY-EYLAU JUNIOR HIGH		LIBERTY-EYLAU SENIOR HIGH		LINE
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Grade 7	Grade 8	Grade 9	Grade 10	2
Estimated Participants (1971-72)	10	52	14	46	40	250	169	94	86	80	115	49	60	57	66	106	3
Projected Membership (1971-72)	125	125	119	112	110	537	280	270	282	491	473	461	225	223	245	242	4
Percentage Dropouts (1970-71)	0%	0%	0%	0%	0%	0%	1.5%	1.5%	1.5%	4%	6%	3%	0.5%	0.5%	2%	7%	5
CURRICULUM & INSTRUCTION COMPONENT:																	
Curriculum Development:																	
English:																	
Target students	125	125	119	112	110	537	280	270	282	491	473	461					6
Stipends & staff training	1- MC	1- MC	1- MC	1- MC	1- MC	1- MC	2- MC	2- MC	2-VIII	5-VIII	5-VIII	4-VIII					7
Mathematics:																	
Target students	125	125	119	112	110	537	280	270	282	491	473	461					8
Stipends & staff training	1- MC	1- MC	1- MC	1- MC	1- MC	1- MC	3- MC	2- MC	2-VIII	7-VIII	None	None					9
Instruction:																	
Performance contract:																	
Reading & Math Laboratories:																	
Target students	None	None	None	50	50	100	None	None	100	60	40	None	50	50	50	50	10
Facility	None	None	None	½- LEA	½- LEA	1- LEA	None	None	1- LEA	½- LEA	½- LEA	None	½- LEA	½- LEA	½- LEA	½- LEA	11
Equipment	None	None	None	½- MC	½- MC	1- LEA	None	None	1- LEA	½- LEA	½- LEA	None	½- LEA	½- LEA	½- LEA	½- LEA	11a
Materials	None	None	None	½- MC	½- MC	1- MC	None	None	None	None	None	None	None	None	None	None	11b
Additional teachers	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	11c
Aides	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	11d
Stipends	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	11e
Reading Clinic:																	
Target students	10	52	14			72											12
Facility	LEA	LEA	LEA			1- LEA											13
Equipment	LEA	LEA	LEA			1- LEA											14
Materials	MC	MC	MC			1- MC											15
Additional teachers		½- MC	½- MC			1- MC											16
Aides		½- MC	½- MC			1- MC											17
Stipends	None	None	None			None											18
Vocational Orientation Course:																	
Target students						537			86						66		19
Facility						LEA			LEA						LEA		20
Equipment						LEA			VIII						LEA		21
Materials						MC			VIII						VIII		22
Additional teachers						None			1-VIII						1-VIII		23
Aides						2- MC			1-VIII						1-VIII		24
Stipends & staff training						2- MC			1-VIII						2-VIII		25
Vocational Exploratory Course:																	
Target students										80							26
Facility										LEA							27
Equipment										LEA							28
Materials										VIII							29
Additional teachers										2-VIII							30
Aides										2-VIII							31
Stipends & staff training										3-VIII							32

Note:

Code	Meaning
LEA	denotes Local Education Agency funds
VIII	denotes Title VIII funds
I	denotes Title I funds
MC	denotes Model Cities funds

SCHOOLS COMPRISING THE MODEL SUB-SYSTEM:

School	Grades
College Hill Elementary School	Grades 1- 5
Washington Sixth Grade School	Grade 6
College Hill Junior High School	Grades 7- 9
Arkansas Senior High School	Grades 10-12

SCHOOL DISTRICTS PARTICIPATING IN THE TEXARKANA DROPOUT PREVENTION PROGRAM:

District	State
Texarkana, Arkansas School District #7	(Arkansas)
Liberty-Eylau School District #708	(Texas)

Table 7--*continued*

	COLLEGE HILL ELEMENTARY					WASH-INGTON	COLLEGE HILL JUNIOR HIGH			ARKANSAS SENIOR HIGH			LIBERTY-EYLAU JUNIOR HIGH		LIBERTY-EYLAU SENIOR HIGH		LINE
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Grade 7	Grade 8	Grade 9	Grade 10	2
TRAINING & SUPERVISION COMPONENT:																	
Individualized Instruction:																	
English:																	
Target students							169	94	86	125	115						33
Facility							LEA	LEA	LEA	LEA	LEA						34
Equipment							LEA	LEA	VIII	LEA	LEA						35
Materials							MC	MC	VIII	VIII	VIII						36
Additional teachers							None	None	None	None	None						37
Aides							1- MC	1- MC	1-VIII	1-VIII	1-VIII						38
Stipends & staff training							2- MC	2- MC	2-VIII	4-VIII	3-VIII						39
Mathematics:																	
Target students							169	94	86	125	115						40
Facility							LEA	LEA	LEA	LEA	LEA						41
Equipment							LEA	LEA	VIII	LEA	LEA						42
Materials							MC	MC	VIII	VIII	VIII						43
Additional teachers							None	None	None	None	None						44
Aides							1- MC	1- MC	1-VIII	1-VIII	1-VIII						45
Stipends & staff training							3- MC	2- MC	2-VIII	4-VIII	None						46
Behavioral Management:																	
Target students	125	125	119	112	110		280	270	282	491	473	461					47
Stipends & staff training					1- MC	1- MC	5- MC	4- MC	4-VIII	2-VIII	5-VIII	None					48
PPBES:																	
Target students	125	125	119	112	110	537	280	270	282	491	473	461					49
Monitoring and Supervision of Training:																	
Target students	125	125	119	112	110	537	280	270	282	491	473	461					50
PUPIL PERSONNEL COMPONENT:																	
Counseling:																	
Target students			14	46	40	250	169	94	86	80	115				66	106	51
Counselors					1- MC	1- MC	1- I	1- I	1-VIII	1-VIII	1-VIII				½-VIII	½-VIII	52
Aides						1- MC			1-VIII	½-VIII	½-VIII				½-VIII	½-VIII	53
Materials					MC	MC	VIII	VIII	VIII	VIII	VIII				VIII	VIII	54
Equipment					MC	MC	VIII	VIII	VIII	VIII	VIII				VIII	VIII	55
Information System on Students:																	
Target students	125	125	119	112	110	537	280	270	282	491	473	461					56
Group Activities:																	
Peer tutoring:																	
Target students									86	80	115						57
Intramurals:																	
Target students									86	80	115						58
Special Services:																	
Community Contact Persons:				1- MC	1- MC	2- MC			1-VIII	2-VIII	2-VIII				1-VIII	1-VIII	59
Target students			14	46	40	250			86	80	115				66	106	60
Target parents			28	92	80	500			172	160	230				132	212	61
Materials				MC	MC	MC			VIII	VIII	VIII				VIII	VIII	62
Equipment				MC	MC	MC			VIII	VIII	VIII				VIII	VIII	63
Referral Services:																	
Target students									86	80	115						64
Health Services:																	
Target students									86	80	115						65

materials was in fact merely a deferred payment to purchase the EDL equipment already in the Rapid Learning Centers.)[41] The actual pilot project, summarized in Table 8, includes close to a third of the total expected enrollment in the two target schools involved (42 percent included at the junior high). This is large enough to have impact, but shows the drastic reduction in expectations (by being about the same-sized effort as last year in numbers of classes) from the full-scale introduction of turnkey reading and math into all secondary classes forecast a year ago.

Table 8

TRAINING AND SUPERVISION COMPONENTS:
INDIVIDUALIZED INSTRUCTION

Subject	College Hill Junior High Grades 7,8,9	Arkansas Senior High Grades 10,11	Total
English			
Target students	349	140	489
% of estimated enrollment aides	3	2	5
Mathematics			
Target students	349	140	489
% of estimated enrollment aides	3	2	5

Table 9 summarizes the four different Instruction Component programs. A significant change is that the RLCs are being operated by the school districts this year, in line with the recommendation made in the Final Evaluation Report.[42] Liberty-

---

[41] "Texarkana Turnkey: District Purchases $35,000 of EDL Materials," *Educational Marketer,* Vol. 3, Nos. 21-22, August 1971, p. 7.

[42] Reducing objectives or hiring more staff was recommended in the 1970-71 Final Evaluation Report. Andrew and Roberts, op. cit., p. 118.

Table 9

CURRICULUM AND INSTRUCTIONAL COMPONENT: INSTRUCTION

Program	College Hill Elem.	Washington Elem.	Liberty-Eylau Jr. High	College Hill Jr. High	Liberty-Eylau Sr. High	Arkansas Sr. High	Total
1. Performance Contracted Reading & Math Labs							
Grades	(4,5)	(6)	(7.8)	(9)	(9,10)	(10,11)	
Target students	100	100	100	100	100	100	600
2. Reading Clinic							
Grades	(1,2,3)	(6)					
Target students	76	72					148
Addnl. teachers	1	1					2
Aides	1	1					2
3. Vocational Orientation							
Grades		(6)		(9)	(9)		
Target students		537		86	66		689
Addnl. teachers				1	1		2
Aides		2		1	1		4
4. Vocational Exploration							
Grade						(10)	
Target students						80	80
Addnl. teachers						2	2
Aides						2	2

Eylau is participating in the RLCs at full strength, but beyond that has only the ninth-grade vocational course as a new program. The Model Cities Reading Clinic supplements the contracted centers by taking in grades 1, 2, and 3, and will probably also support the Follow Through programs for the first grade. For the vocational orientation course, designing a course for the entire Washington sixth grade will clearly be the biggest challenge. The appearance of a vocational preparation course (at Arkansas High) in the proposal finally makes explicit the full dimensions of the career education effort that has been planned and supported informally for several years.

Liberty-Eylau is rarely included among the other programs, which may reflect the realities of the extra work required by including another district. For example, the student information system and the PPBES system apply to the four Arkansas schools but not to Liberty-Eylau. Even more significant is their omission from the curriculum development effort. They participate in the counseling and special services efforts, but it clearly seems to have been important this year to try to minimize the problems of coordination and adminstration.

The new project structure is given in Fig. 4. What is striking here is the heavy load on the manager of the curriculum and instruction component. Last year, curriculum and turnkey were combined unsuccessfully; this proposed combination seems if anything to be more demanding. Also of note are the number of contractors (five) with continuations on all but the PPBES from last year, and new personnel from the Region VIII ESC and from the Texarkana Mental Retardation Center added for the teacher training and supervision component.

CONCLUSIONS

The most notable achievement in the plans for next year is the attempt to treat in one program *each* of the likely contributors to the problem of students dropping out of school (before they have the skills or diploma to make it on their own). And none of the efforts except the PPBES and the peer tutoring are entirely new experiences, a definite management plus. From a larger view, the degree of coordination between this Title VIII program, other school programs, Model Cities, the regional Educational Service Center, and the Office of Education is remarkable. The most important example has been the integration of the dropout program with the educa-

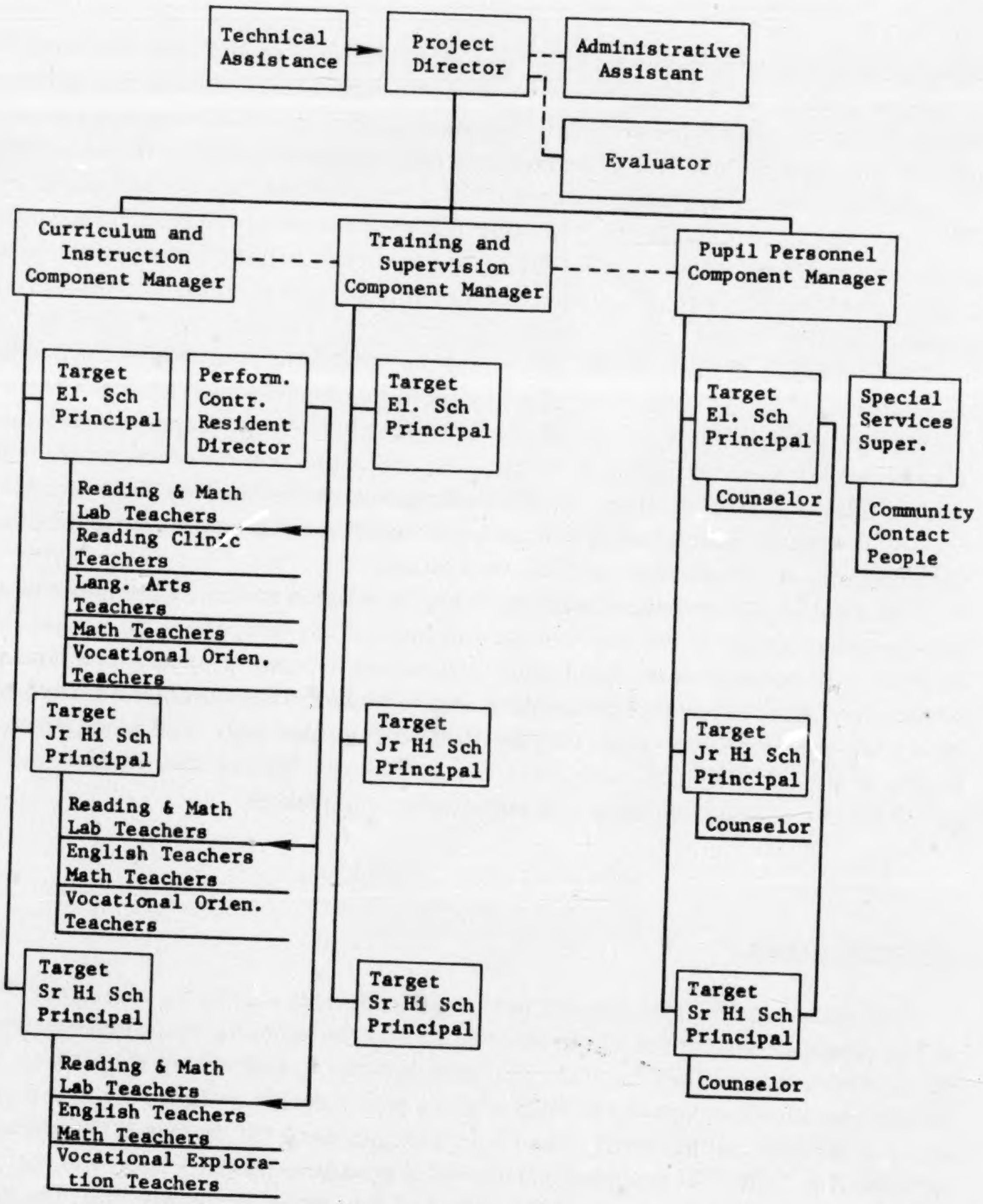

Technical Assistance
Project Director
Administrative Assistant
Evaluator
Curriculum and Instruction Component Manager
Training and Supervision Component Manager
Pupil Personnel Component Manager
Target El. Sch Principal
Perform. Contr. Resident Director
Reading & Math Lab Teachers
Reading Clinic Teachers
Lang. Arts Teachers
Math Teachers
Vocational Orien. Teachers
Target Jr Hi Sch Principal
Reading & Math Lab Teachers
English Teachers
Math Teachers
Vocational Orien. Teachers
Target Sr Hi Sch Principal
Reading & Math Lab Teachers
English Teachers
Math Teachers
Vocational Exploration Teachers
Target El. Sch Principal
Target Jr Hi Sch Principal
Target Sr Hi Sch Principal
Target El. Sch Principal
Counselor
Special Services Super.
Community Contact People
Target Jr Hi Sch Principal
Counselor
Target Sr Hi Sch Principal
Counselor

Fig. 4—Project personnel organization chart

tion and manpower component of Model Cities (which supplied partial support), thereby providing a program with a strong chance of being relevant to the community.

It is especially promising to see the emphasis on training teachers and school personnel this year, since that was probably among the weakest operational areas last year (notably for turnkey personnel and the school administrators affected by the program). However, this does not affect the management and planning problems, and that area seems the most likely source of trouble, as in the past. As mentioned in the conclusions for last year, even though expertise is badly needed, bringing in a large number of contractors can create as many problems as it solves. Certainly, this and many other demands on management time can be greatly reduced by the simple expedient of pursuing more limited objectives. The project director noted several times that bringing in a program from the outside requires an enormous amount of liaison work if it is to be at all acceptable to its recipients. As in other programs, there is the problem of involving the users in the detailed planning. This third year seems to have made a good start in that direction. Having the learning centers run by the schools should also generate more involvement, and allow greater flexibility of goals.

Overall, the most important need seems to be to have explicit management training of key project and school personnel, going beyond what can be picked up by merely associating with a management support contractor.

V. CONCLUSIONS

Performance contracting has been a mechanism for changing the educational process in the Texarkana schools. The Rapid Learning Centers and Laboratories and the turnkey classrooms that are designated as the second stage in the eventual dissemination of the new technology *are* different from the conventional Texarkana classrooms in materials and procedures. Nonetheless, the materials and procedures in the turnkey classrooms embody the 1969-70 RLCs' learning system in only the most general fashion. Moreover, considering the expensive equipment used by EDL in the RLCs during 1970-71, and the complexity of its materials and procedures, it is hard to see how any inexpensive turnkey process could achieve much replication. Even if the EDL system had been cost-effective as measured on an achievement-year basis, widespread replication of the system, or even introduction of some close modification of the system, would require two things: a considerably higher dollar expenditure per student, and greater logistics and managerial support. Considering the unhappy state of the Texarkana economy and the current low level of per-student expenditure, the first requirement does not seem likely to be met. And the second requirement would apparently be an obstacle, considering the difficulty during 1970-71 in providing materials for the turnkey classrooms on a timely basis, and the difficulty in providing training, monitoring, and assistance for the turnkey teachers.

In terms of its prime goal of reducing the dropout rate, the dropout prevention program succeeded well in both 1969-70 and 1970-71; but equally, it failed to make much improvement in the academic achievement of its population of potential dropouts. And in each of its three years, it programmed goals far too ambitious for the available resources; nonetheless, the attempt to reach those goals has prepared the groundwork for such major innovations as program budgeting and district-wide manpower education programs. Thus, with all program elements controlled by the LEA in 1971-71, performance contracting seems to have been an effective catalyst for what was an inherently difficult process of change.

In short, we expect that performance contracting will lead to a compensatory education program that is a substantial advance over the pre-1970 program in terms of the curriculum and instructional method. It may even lead to a curriculum improvement for Texarkana schools in general. When the turnkey process is completed, however, we would expect the regular Texarkana classrooms to be using educational processes that only indirectly reflect the Rapid Learning Centers.

Achievement measurement remains a vital problem. True, the definition of standards for inadmissible similarity between excercise questions and test questions and the better monitoring of materials have greatly lessened the chance of another test-teaching scandal. Nonetheless, serious problems remain.

Some testing problems are logistic and administrative. It has been a strain to administer pre- and post-achievement tests to a large group of students in addition to all the other diagnostic, interim-objective, and miscellaneous tests involved in the program. A more serious problem is the gap between the short-run objectives of instruction and what standardized norm-referenced tests actually measure. The nature of standardized norm-referenced tests makes them clumsy and inaccurate devices for measuring the effectiveness of a learning system.

Texarkana in 1970-71 sought to deal with this problem by using criterion-referenced tests for part of the contractor's payment and for evaluation purposes. This approach has considerable appeal, but it encountered difficulties. Constructing tests is a Herculean task. Administering them is time-consuming and creates many administrative headaches. In Texarkana the initial concept of testing all students and all objectives had to be replaced by a sampling procedure. The lesson would seem to be that the science and art of criterion-referenced testing still needs considerable development.

The Texarkana evaluation procedures have been a very strong aspect of the program. Because the evaluator was located within commuting distance and because his funding was unusually generous compared with that in some other performance contracting programs, he was able to provide almost continuous feedback to the program's decisionmakers. This feedback has been highly useful and, at the time of the test-teaching scandal, almost essential. The use of an outside auditor presumably removes the chance that the close connection between the evaluator and the program management could lead to bias.

In 1970-71, the link between the evaluator and the Texarkana program-management was further strengthened by giving management-support duties to one of the former evaluators. We believe that the close linking between evaluation and management in this program is a model that could well be applied in other performance contracting programs. There is, of course, the need to maintain public confidence in the announced program-outcomes; if there is a close link between management and evaluation, an outside audit may be important. We believe, however, that the prompt feedback of pertinent evaluation data is one of the most impressive features of the Texarkana program.

Other features of the Texarkana program were less conducive to program improvement. The proliferation of contracts and subprogram directors tended to diffuse and confuse lines of authority and responsibility. In addition, the performance contracts for the RLCs monopolized the attention of the program director. In such a situation it would have been unreasonable to expect a program director to be able to assure that all parts of the program received their necessary share of management attention.

The involvement of the Model Cities organization in getting the program going and providing funds at some crucial times was very important. Moreover, it provided the mechanism in 1970-71 for extending performance contracting into the elementary schools, albeit on a modest scale. This history suggests the importance of some independent seed-money in the development or expansion of programs.

Texarkana was the first major performance contracting program and received intense publicity. Since then, some of the glare of the spotlight has shifted to other performance contracting efforts, no doubt to the relief of Texarkana school officials. Even so, the 1970-71 experience demonstrates that Texarkana's program still has many important implications for American education.

Appendix A

CONTRACT BETWEEN TEXARKANA AND THE INSTITUTE FOR POLITICS AND PLANNING

KNOW ALL MEN BY THESE PRESENTS, that, Texarkana School District #7, Miller County, Arkansas, a public school system incorporated in the State of Arkansas with principal offices at Texarkana, Arkansas, designated as Fiscal Agent for a planned "dropout prevention project" to be funded by the U. S. Office of Education, hereinafter described as the "Agent", for and in consideration of five dollars ($5.00), and other valuable consideration, receipt whereof is hereby acknowledged, does hereby contract and agree with the Institute for Politics and Planning, a corporation organized under the laws of Washington, D. C., and with principal offices in Arlington, Virginia, but licensed to do business in the State of Arkansas hereinafter described as the "Contractor" as follows:

WITNESSETH THAT:

WHEREAS, the Agent has received a planning grant under the auspices of the U. S. Office of Education to plan and to conduct a "Dropout Prevention Program" in the Texarkana, USA, area, and desires certain technical and management assistance in the making of such plan, and

WHEREAS, the Contractor is prepared to provide certain technical assistance and advice to the Agent in the making of such plan.

NOW THEREFORE, the parties do mutually agree as follows:

1. Scope of Work - The Contractor shall, upon the terms and conditions herein set forth:

(a) Analyze and determine the nature and extent of the "dropout" problem of the public school districts which will participate, hereinafter described as the "Participants", in the planned dropout prevention project.

(b) Assist the Participants to define and refine to operational terms the over-all objectives of the contractor-operated achievement center and work-study program, as indicated in the Preliminary Proposal submitted to USOE on December 16, 1968, hereinafter described as the "Preliminary Proposal".

(c) Assist the Participants to determine the criteria for selecting students who will participate and determine the criteria for measuring the success of the program.

(d) Assist the Participants to convert the objectives of the dropout prevention program to performance specifications and draft a mutually acceptable "request for proposals" which will be sent to potential contractors, after notification of award.

(e) Assist the Participants to develop mutually acceptable criteria for evaluating sub-contractor proposals.

(f) Develop and draft for approval an over-all operational program plan incorporating all the above and other requirements stipulated in USOE guidelines, as appropriate.

(g) Develop and present to Participant for consideration of approval an over-all multi-year management plan which will include program budgets, costs and schedules, requirements for phasing "in" and "out" program elements, and requirements for project management assistance.

(h) Assist the Participants to develop an over-all research and experimental design component.

(i) Assist the Participants garner local, community, and other support for the effective implementation of the overall project.

(j) Draft a mutually acceptable final proposal to be submitted to USOE.

2. Consultation - The Agent and Participants' staff members shall cooperate with the Contractor's representatives, and shall make themselves available at all reasonable times during ordinary working hours during the period of the contract to confer on any points which may arise as the project progresses. The Contractor shall consult at least once every two (2) weeks with representatives of the Agent during the contract period.

3. Period of Performance - The final proposal will be submitted for approval by the Fiscal Agent and others, as appropriate, and as soon as feasible but no later than May 1, 1969. Professional assistance will be available for appropriate use until award of the contract but no later than June 15, 1969. A preliminary draft proposal-report, written or oral, as appropriate, will be made no later than April 25, 1969. It is further understood that all of the above-stated dates are subject to change by mutual consent.

4. Exceptions - In order to minimize costs and time, to the extent possible as mutually determined, maximum use will be made of local school officials, teachers, counselors, and other employees and employees of other local agencies which have had experience with or have knowledge about the nature of the dropout problem. When appropriate the Contractor will request the administrative assistance of appropriate school officials and employees who have expertise in specific directly related areas.

5. Consideration - The Agent shall pay to the Contractor a fee based on services rendered and direct costs incurred. The fee for professional services will be $100.00 per day for not more than 60 days. Direct costs will include travel, subsistence, communications, clerical assistance, printing and other reasonable expenses incurred in the performance of the contract. The Contractor shall be paid at the end of each thirty (30) day period, commencing thirty (30) days from the date hereof or letter of intent to enter into contract proving that funding agency authorization has been awarded to the Agent. A detailed invoice showing each item of services and expenses shall be provided to the Agent by the Contractor for each payment, and

the Agent shall not be liable for any payment until such invoice is furnished. Final payment under the contract shall be made not less than fifteen (15) days after submission of Contractor's final report and invoice. Total payment will not exceed $9650.00 (nine thousand six hundred fifty dollars).

6. Contractor Staff - Contractor's "Project Director" for this contract shall be Mr. Charles Blaschke, assisted by Dr. Joseph Hart, and two other qualified consultants as required.

7. Overtime - No overtime compensation shall be paid to the Contractor for any work performed hereunder.

8. Availability of Office Space - The Agency shall provide such temporary office space as may be necessary for use of professional staff members of Contractor in the Texarkana, USA, area during the period of the contract.

9. Inspection and Interim Reports - The Agency shall have the right at all times during the period of the contract to inspect the work performed by the Contractor, and to request brief interim oral or written reports of work progress from the Contractor as may be reasonably necessary to assure proper performance of the Contract.

10. Copyrights and Reproduction - Reports, surveys, and other information produced under this contract shall be the sole property of the Agent, including copyrights and proceeds from the sale or reproduction thereof, if any, except that the Contractor shall likewise have the right to reproduce and use such reports, surveys, and other information as it produces under the contract, provided any income or profit arising therefrom, if any, shall accrue to the benefit of the Agency.

11. Changes and Conditions - Changes, additions or conditions to this contract may be made only by mutual agreement of the parties.

IN WITNESS WHEREOF, the parties hereto have executed this contract this 12 day of March, 1969.

WITNESSED:
J. A. Covert
Janice Green

Texarkana School District No. 7
By Edward D. Price
Fiscal Agent

The Institute for Politics and Planning
By Arthur W. Barber. Pres.
President

APPROVED BY:
Bill K. Ford
Texas Independent School District

Lewis E. Lemmons
Liberty - Eylau School District

ESTIMATED BUDGET

1.	Technical Services	60 man days at $100.00	$ 6,000.00
2.	Travel	(Blaschke and Hart)	1,200.00
		(Staff consultants)	400.00
3.	Telephone		400.00
4.	Administrative-Clerical		1,000.00
5.	Subsistence		450.00
6.	Printing and reproduction		50.00
7.	Expendable Supplies		150.00
		Total	$ 9,650.00

Appendix B

TEXARKANA-DORSETT CONTRACT

SUBCONTRACT BETWEEN THE LEA FOR THE TEXARKANA DROPOUT PREVENTION PROGRAM AND DORSETT EDUCATIONAL SYSTEMS, INC.

Purpose

This subcontract is based upon the RFP dated 6-10-69, issued by the LEA, the proposal submitted by Dorsett, and a mutually agreed upon Letter of Intent. It is intended to stipulate the scope of work, responsibilities, and obligations assumed by both parties, but to the extent that further details are required to interpret matters arising under it the above documents are incorporated by reference.

I. Period of Contractual Obligation

The period of contractual obligation begins September 10, 1969 and extends until June 5, 1970.

II. Previous Obligation

The grant terms and conditions of grant # OEG-0-9-130045-3360 Project # 13-0045 between LEA, Texarkana, Arkansas School District # 7 and the U. S. Office of Education are incorporated herein by reference and made a part of this contract.

III. General Scope of Work Assumed by Dorsett

Dorsett agrees:
a. to organize and operate the instructional component of the first

phase of the Texarkana Dropout Prevention Program.

b. to provide instruction in basic reading, math and study skills to a minimum of 200 students. The study skills may be measured by inference of the achievement in math and reading areas.

c. to hire and train local personnel, if possible these people will come from the target area, as para-professionals in the operation of the instructional program.

d. to utilize at least 20 teachers and administrators from theparticipating school systems who will work part-time in the instructional program and will facilitate the contemplated transfer of the Dorsett material to the Texarkana Rapid Learning Centers. Their first hand knowledge of the nature and extent of academic problems unique to the Texarkana schools will be useful to the contractor.

e. to operate centers at locations mutually agreeable to the parties.

IV. SELECTION OF STUDENTS

a. All students who participate in this instructional program will have grade level deficiencies, in reading and math, of 2.0 or more as determined by the Iowa Test of Basic Skills or the SRA Tests. Further, all of these students will have no less than the minimum Intelligence Quotient, as determined by Lorge Thorndike and SRA Ability Quotient, of a regularly enrolled student as required by the two school districts, seventy in Texas and seventy-five in Arkansas, by the Project Management Office or its delegated representative.

b. All students who participate in the first phase of this instructional program will come from grades 7-12 in the regular school system.

c. The makeup of the first 200 students will consist of approximately equal numbers of volunteers, students assigned by counselors, and students randomly selected from those with a grade level deficiency of 2.0 or more.

d. The makeup of any group of students beyond the initial 200 will be similar to that of the first 200, or will have characteristics determined by the LEA and stipulated by the reference material. *(RFP, Dorsett's proposal, and the Letter of Intent).

V. Testing

a. The entry status for each student will be determined by the most recent test. The Texarkana Arkansas school system used ITBS Form 3 and the Liberty Eylau school district used SRA Achievement Series Form D. These tests were given the first week of October, 1969. In all cases the tests were given on a group basis and the counselors in the individual schools administered the tests. The same conditions will exist for the post-test as was the case in the pre-test.

b. The parties agree that Dorsett will have the option to ask for retesting or adjustment to entry level standing determined by pretests where its diagnostic test shows a substantial difference and that the pre-test may have been insensitive to the actual grade level deficiency when the deficiency is 2.0 grade levels or more. Diagnostic test given by Dorsett should be administered under conditions similar to that of the initial pre-test. Further, Dorsett will notify the LEA as to what diagnostic test will be used and will allow observation of the testing by theProject Manager or the Internal Evaluator. The negotiation of the interpretation of these tests will be handled by Dorsett's representative and the Project Manager with the help of the Internal Evaluator. Final determination of whether re-test will be given will rest with the Project Manager.

c. Exit level achievement will be determined by the ITBS or SRA tests administered by a delegate of the LEA.

d. It is the responsibility of the LEA to report in writing the test results for each student to Dorsett. Results of testing conducted by Dorsett will be conveyed to the LEA in the form of written reports to be the basis for each monthly evaluation. While Dorsett may not administer tests comparable to entry or exit, national norm tests; it will continually obtain progress check tests for each subject unit. The number of such tests successfully completed by each assignee and the scores will be included in the Dorsett monthly report.

VI. Attendance of Students

a. Withdrawal from the Dropout Prevention Program may occur under the following circumstances and Dorsett will be paid on the hourly basis.

(1) Students move out of participating school districts.

(2) Student is chronically truant as defined by locally applicable regulations. Regulations being that a student be present 50% of any grade marking period.

(3) Student suffers prolonged period of illness. Same regulations as truancy.

(4) Student is removed from program on the mutual agreement of the LEA and Dorsett. A student will be considered a legitimate withdrawal if he enrolls in the program, participates for a minimum of ten hours of instruction, and withdraws from the program for any of the above reasons. If the student is in the RLC for less than ten hours, no payment will be made to Dorsett.

b. In the event that a student withdraws from the program, the LEA will, whenever possible or practical, fill the empty slot with another student, no later than 30 days before the termination of the grant June 5, 1970) . Low academic performance will not be considered an adequate reason for withdrawal from the program until the parties to this contract mutually agree.

VII. Cost of Mobile Facilities and Refurbishing

a. Dorsett will assume the cost of providing one mobile facility during Phase I of this project to be used as an instructional center at the Texarkana Arkansas High School. Two of the four or more Rapid Learning Centers operated by Dorsett are to be refurbished rooms in existing schools. Two or more of the Rapid Learning Centers may be operated in mobile classrooms provided by Dorsett and for which a monthly rental allowance of $95.00 per mobile classroom will be paid by the project. At any time during the contract period the LEA may purchase these mobile classrooms at Dorsett's actual cost less accumulated rental payments.

VIII. Method of Cost Reimbursement

a. In consideration for services rendered, Dorsett will be compensated on the basis of actual student successful performance, not to exceed $135,000.00 in total and subject to reduction on failure to obtain achievements or performance.

b. The student performance differential is determined by subtracting the entering grade level achievement in math and reading from the exit level. Entry status and exit status are based on the SRA and ITBS tests as weighted on a basis to be determined no later than February 1, 1970. This procedure will be applied to all assignees except withdrawals, and a small number of students, assigned by non-random procedures, to be mutually agreed by the parties to this contract, for whose learning services Dorsett will be reimbursed at the average hourly rate of other students.

c. Dorsett will be compensated on the basis of obtaining one grade level increase per subject area in eighty hours of instructional center study for $80.00, or proportionally for each fraction thereof. For students requiring more or less than 80 hours per subject grade level increase, the payment to Dorsett per subject grade level increase will vary according to the formula $80.00 x 80 hours divided by actual study hours required per subject grade level increase. According to this formula, one grade level increase per subject area in 110 hours of instruction would cost $58.18. Both parties agree that $106.67 for 60 hours represents the upper limit of the cost reimbursement formula and that if over 110 hours of instruction are required, the payment for a grade level increase will be reduced by $1.00 per hour for every hour over 110. This payment schedule will result in no payment to the contractor if 168 or more hours are required for one grade level achievement.

d. Monthly progress payments may be made to Dorsett for reimbursement of not more than an estimated 85% of direct and indirect costs incurred by Dorsett for its' operations, provided further that the payments do not exceed the estimated accruals to Dorsett for grade level gains, based on sampling tests or progress check tests, in the professional judgement of the Project Director. It is noted that repeated testing with the same or similar test instruments used for final audit on student disassignment would contaminate the validity of results, so different tests must be used for interim evaluation.

IX. Availability and Cost of Capital Equipment

a. Dorsett agrees to sell 95 units of the Dorsett M86 Teaching Machines at a unit price of $200.00 for a total of $19,000.00. All equipment will carry standard warranty. In the event that the contractor fails to achieve substantial gains in the program Dorsett will repurchase the equipment at full price

b. During the period of this contract, Dorsett is responsible for the full maintenance and upkeep of the Dorsett manufactured equipment. In accordance to the standard one year warranty, repairs will be made on a 24 hours basis or another M86 machine will take its place. An adequate amount of supplies and parts for the M86 will be available. The training of local personnel for maintenance of the M86 will also be part of the program.

X. Use of Consultants Listed in the Dorsett Proposal

It is understood that all key consultants or persons of similar status and staff members listed in the Contractor Proposal will be used on a working level, including site visits. Deletion or addition of consultants must be mutually agreed upon by both parties. The [illegible] must be satisfied as to the active participation of those [illegible] used by the Contractor. Dr. James L. Evans will be an active and frequent contributor to this program.

XI. Availability of Instructional Materials

a. Materials to be used in this instructional program will substantially duplicate that listed in the Dorsett Proposal.
b. Dorsett will provide materials for medium and high achieving students and will have such material available at the instructional centers for testing with a sample population no later than April 30, 1970.

XII. Community and Public Relations

a. The LEA is responsible for informing parents, instructional center employees, and students about testing procedures, scheduling, dismissal, and progress reports.
b. All official press releases concerning this program should originate from LEA.

XIII Review of Contract

The parties agree that from time to time the LEA may review progress on the program and ask for contract amendments if reasonably anticipated progress is not being obtained.

XIV. Applicable Statutes

In case of conflict arising under this contract the laws of the State of Arkansas will prevail. Unless otherwise stipulated, parties will be bound by the request for proposal and the proposal of the Contractor.

XV. Officials Not to Benefit

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

XVI. Covenant Against Contingent Fees

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business . For breach or violation of this warranty the Fiscal Agent shall have the right to annul this contract without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

XVII. Equal Employment Opportunity

(Section 202, Executive Order 11246, September 24, 1965, 30 FR 11269)

"During the performance of this contract, the contractor agrees as follows:"

"(1) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion,or transfer, recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

"(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed color, or national origin.

"(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

"(4) The contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

"(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

"(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further government contracts in accordance with procedures authorized in Executive Order no. 11246 of September 24,1965 and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

"(7) The contractor will include the provisions of Paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontract or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interest of the United States."

XVIII. Certification of Non-Segregated Facilities

The contractor or subcontractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location under his control, where segregated facilities are maintained. The contractor or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. He further agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000.00 which are not exempt from the provisions of the Equal Opportunity Clause; that he will retain such certifications in his files; and that he will forward the following notice such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

XIX. Notice to Prospective Subcontractors of Requirement for Certifications of Nonsegregated Facilities

A Certification of Nonsegregated Facilities, as required by the May 9, 1967, order (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding $10,000.00 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all

106

subcontracts during a period (i.e., quarterly, semiannually, or annually).

Note: The penalty for making false statements in offers in prescribed in 18 U.S.C 1001.

12/2/69

Edward D. Trice
Edward D. Trice, Fiscal Agent

December 2, 1969

Loyd Dorsett, President
Dorsett Educational Systems, Inc.

Appendix C

LETTER OF INTENT, TEXARKANA TO DORSETT

TEXARKANA SCHOOL DISTRICT NO. 7
OFFICE OF THE SUPERINTENDENT
TEXARKANA, ARKANSAS

September 12, 1969

Loyd Dorsett, President
Dorsett Educational Systems, Inc.
Norman, Oklahoma

Dear Mr. Dorsett:

This Letter of Intent is based upon the Request for Proposal issued by the fiscal agent and the Proposal submitted by Dorsett Educational Systems, Inc., both of which are included by reference. It is intended to outline the mutually agreed upon provisions which are stated in the Proposal and which will be the basis for a contract to be prepared and executed by the Fiscal Agent and Dorsett Educational Systems.

Dorsett has agreed to organize and operate the centers and to be compensated on the basis of obtaining one grade level increase in eighty hours of center study for $80.00 as stated in the proposal with limits on the formula matrix being set as follows: the upper limit is eighty hours for approximately $107.00; the lower limit is to be set between 100-110 hours with the precise limit being negotiated between the parties.

It is mutually agreed that the makeup of the first 200 students will consist of approximately 50 volunteers, 50 students assigned by counselors, and the remaining 100 randomly selected from those with grade level deficiencies of 1.5 or more. Based on this computation, Dorsett will grant a 7% discount on the payment per grade level increase, if the average I.Q. of the 50% of students randomly selected is 100 or greater. Procedure for selection and the termination of discount for additional assignees will be mutually agreed upon.

Both parties agree that in addition to the regular vocabulary test used to determine student level, differential vocabulary testing developed in conjunction with local teachers may be used with the weight given to this test to be determined by the local school boards.

The Project Manager will have the option to retest the enrollees for retention, at any time up to six months after leaving the center, for comparison of retention to normal achievers in the local area which could be a basis for adjustment.

The entry status will be determined by the most recent Iowa Tests or equal, and if tested prior to August, 1969, but no more than one year ago, the entry grade level will be adjusted upward based on the usual Growth Curves.

Dorsett will have access to the utilities, bell, and intercom services of the school being serviced where a mobile facility is moved onto the school grounds; and Dorsett will not be reimbursed for the cost of the mobile center to be used at the Arkansas High School. Materials listed in the proposal will be purchased through the local school system for benefits of delivery and discounts. Dorsett will assist the local school purchasing agent in acceleration of the procurement.

The Parties agree that Dorsett will have the option to ask for retesting or adjustment to entry grade level standing determined by pre-tests where a diagnostic test shows a substantial difference and that the pre-test may have been insensitive to the actual grade level deficiency when the deficiency is 2.0 grade levels or more.

Dorsett may use one or two teachers on a sabbatical basis on approval of the local school board with the local school system being reimbursed from contractor payments for teacher salaries.

The Parties agree that the Letter of Intent is being used to allow Dorsett to begin work so the center or centers will be in operation, subject to refurbishment and purchasing problems, by October 15, 1969.

The Parties agree that after 120 days of operations, the Project Manager may review progress on the program and ask for contract amendments if reasonably anticipated progress is not being obtained.

The Parties agree that the $80/80 hour formula will be slightly higher for the first 200 students, and will be decreased as the operations are extended to additional students based on operational efficiency reflecting economies of scale.

The Parties agree that materials for medium and high achievers will be available at the center, and will be tested with sample population no later than April 30, 1970.

Dorsett has agreed to quote prices on its equipment utilized in the center for future purchase up to September, 1973.

It is understood that the consultants and staff members listed in the proposal will be used on a working level, including site visits.

Yours truly,

Edward D. Trice

Edward D. Trice
Fiscal Agent
Rapid Learning Center

EDT:ra

Appendix D

CONTRACT BETWEEN TEXARKANA AND REGION VIII EDUCATION SERVICE CENTER, 1969-70

REGION VIII EDUCATION SERVICE CENTER
P. O. Box 689
Magnolia, Arkansas 71753

SERVICE CONTRACT

This contract is made between the Region VIII Education Service Center (Magnolia School District No. 14), hereinafter known as the contractor and Texarkana Dropout Prevention Program (Texarkana School District), hereinafter known as the purchaser.

The contractor agrees to provide and the purchaser agrees to request and accept on a frequent and continuing basis, the internal evaluation of the Texarkana Dropout Prevention Program. This service is to be provided beyond those normally provided from Title III, ESEA funds during the 1969-70 school year.

For the internal evaluation services, the purchaser agrees to pay the contractor the total amount of $11,500.00, with one fourth of this amount ($2,875.00) to be paid on December 30, 1969 and one fourth at each of the following dates: February 28, 1970; April 30, 1970; June 30, 1970, at completion of the evaluation report.

The proposed expenses are established as follows:

Special Consultants	$2,000
Travel	800
Clerical & Material	1,000
Data Processing	500
Region VIII Personnel	7,200
TOTAL	$11,500

This contract may be renewed annually by mutual consent of both contractor and purchaser and is signed in triplicate by the following official representatives of the contractor and purchaser.

Edward D. [illegible] 12-31-69

PURCHASER, Fiscal Agent Date Signed
Texarkana Dropout Prevention Program

12-12-69

CONTRACTOR, Carl[illegible]n [illegible], Superintendent
Magnolia School District No. 14

Fay W Smith 12-12-69

Fay W. Smith, Ed. D., Director
Region VIII Education Service Center

Appendix E

CONTRACT BETWEEN TEXARKANA AND EPIC EVALUATION CENTER, 1969-70

SUBCONTRACT BETWEEN THE LEA FOR THE
TEXARKANA DROPOUT PREVENTION PROGRAM AND
EPIC EVALUATION CENTER

Purpose

This subcontract is intended to stipulate the scope of work, responsibilities, and obligations assumed by both parties. The purpose of the Educational Audit is to verify the activities and results reported by the internal evaluation of a project or the instructional program of a local educational agency. Since the basic purpose of the evaluation program is "to provide information for decision-making," the educational audit should provide verification of information regarding three basic aspects of instructional programs:

1. Program management
2. Program effectiveness
3. Program costs

I. Period of Contractual Obligation

The period of contractual obligation begins December 1, 1969 and extends until June 5, 1970.

II. Previous Obligation

The grant terms and conditions of grant #OEG-9-130045-3360 Project

#13-0045 between LEA, Texarkana Arkansas School District #7 and the United States Office of Education are incorporated herein by reference and made a part of this contract.

III. Scope

The scope of the educational audit is limited in a general way to the process of the internal evaluation program. However, should the information from the internal evaluation program be insufficient in providing information for decision-making, the scope of the educational audit should include suggestions and recommendations to these concerns.

IV. Reports

The general responsibility of the educational audit is to check, verify and report on the information provided by the internal evaluation program. To be as meaningful as possible to the project director, three main reports should be made:

1. A Planning Report--this report is typically concerning the scope and adequacy of the planned evaluation program at the beginning of the project operation on or before December 1, 1969.
2. A Process Report--this report deals with the implementation process of the planned evaluation program, particularly the monitoring systems and schedules of evants on or before February 1969.
3. A Recycling Report--this final report reviews the findings, results, and recommendations of the internal evaluation program with regard to program management.

V. Costs

The EPIC Evaluation Center, Tucson, Arizona, agrees to fulfill the function of educational auditor for the Dropout Prevention Program, Texarkana, Arkansas, for the total amount of $5,111.70, with two-thirds of this amount ($3,407.80) to be paid to the EPIC Evaluation Center in advance, and one-third of the amount ($1,703.90) to be paid at the completion of the final audit.

The proposed expenses are established as follows:

Travel	$ 632.00
Per Diem	240.00
Clerical, Materials	800.00
Computer Facility	475.00
Personnel	2,500.00
	4,647.00
Administrative Overhead	464.70
Total	$ 5,111.70

Robert E. Kraner, Assistant Director EPIC Evaluation Center	LEA Texarkana Dropout Prevention Program

AGREEMENT

The EPIC Evaluation Center, 1034 East Adams, Tucson, Arizona, agrees to perform the functions and responsibilities of the outside educational accomplishment auditor for the Texarkana Dropout Prevention Program, Texarkana School District, Texarkana, Arkansas, for the consideration of three thousand, four hundred eighty-eight dollars and ten cents ($3,488.10).

The primary responsibilities of the auditor will be to:

a. verify the results of the project evaluation, and

b. assess the appropriateness of the evaluation procedures.

1. Services and Products

The audit plan is referenced to the Texarkana Dropout Prevention Program, Texarkana, Arkansas, grant #OEG-9-130045-3360, Project #13-0045. Services to be provided are:

a. to critique the evaluation plans submitted by the internal evaluator for all project components and to make general recommendations regarding their effectiveness.

b. to critique, verify, and make general recommendations with regard to the products and processes of the internal evaluator (see Appendix A). These will include the following:--

   (1) Identification of pertinent variables
   (2) Behavioral Objectives
   (3) Adequacy of measuring instruments
   (4) Monitoring systems
   (5) Calendar of events

c. To provide two audit reports to the LEA in accordance with paragraphs 4 and 6 hereof. These two reports--Interim Report I and Interim Report II--will be based upon information gathered from project records, interviews with project personnel, and data gathered from specified measuring instruments utilized by the internal evaluator. A minimum of four on-site visits will be made by an EPIC representative and three progress checks will be made to the project director during the time of this contract.

2. Audit Personnel

Dr. Robert E. Kraner, Assistant Director, EPIC Evaluation Center, will serve as Project Audit Director, utilizing the specialties of the EPIC staff in the required areas. The qualifications of these personnel are given in Appendix B. Any changes in the assigned staff will be contingent upon approval of the Project Director and USOE representative. The anticipated amount of time required for the audit function by the Project Audit Director and specialties of the EPIC staff are as follows:

Project Audit Director, Dr. Robert Kraner	11 days
Project Advisor, Management Techniques, Dr. Robert J. Armstrong	2 days
Project Advisor, Research and Statistics, Dr. Terry D. Cornell	2 days

Project Advisor, Low Achieving Students, Dr. Richard
H. Powell 2 days

3. Requirements for Space and Documents

EPIC has no need for permanent facilities or secretarial assistance within the Dropout Project; however, it is expected that suitable temporary facilities will be available during on-site visitations, and that transportation will be provided during on-site visits between facilities.

EPIC will require the following documents be provided during the initial audit activities:

a. USOE Guidelines governing the project
b. Complete and corrected copy of the project proposal
c. Copy of pertinent correspondence and publicity releases
d. copy of all sub-contracts of project
e. Actual budget expenditures
f. Measurement Instrument for each stated behavioral objective

4. Schedule of Reports

It is the intent of the EPIC Evaluation Center to review as completely as possible the activities of the internal evaluator of the project. The results of these reviews will be presented in two main written reports during the time of this contract:

a. Interim Report I	March 15, 1970
b. Interim Report II	April 1, 1970

The content and scope of these major audit reports will be entirely dependent upon the written report of the internal evaluator for the project.

5. Sampling Techniques

All forms, checklists, and tests used in the project by the internal evaluator will be evaluated as to validity and reliability by testing specialists at the EPIC Evaluation Center. The qualifications of test administrators, testing procedures, test scoring, and analysis of results will be verified.

Due to the importance of the achievement test data for use in payment of project funds, all achievement testing techniques and scoring will be spot-checked and the analysis of results will be re-calculated at the Center. These results will be made available to the Project Director and will be included in the Final Audit Report.

6. Audit Reports

EPIC will hold periodic progress checks with the Project Director to verify the reports of the internal evaluator. All written reports will go directly to the Project Director. Fifty copies of the Final Audit Report will be delivered to the Project Director.

The Final Audit Report will include verification of all findings and conclusions submitted in writing by the internal evaluator and the assessment of the appropriateness of evaluation procedures.

7. Confidentiality

Only those documents outlined in Paragraph 3 of this contract will be requested from the project. All information and findings will be held in strictest confidence by EPIC.

Any publicity release must have the approval of the LEA.

8. Payment Schedule

The EPIC Evaluation Center shall be entitled to a fixed payment in the amount of three thousand, four hundred eighty-eight dollars ($3,488.00), with one-half of this amount ($1,744.00) to be paid upon receipt of Interim Report II, April 1, 1970, and the remaining one-half ($1,744.00) to be paid upon receipt of the proposed audit contract for 1970-71, June 4, 1970.

9. Grant Terms and Conditions

The Grant Terms and Conditions of Grant #OEG-9-130045-3360, Project

118

#13-0045 between the Texarkana Public Schools and the U.S. Office of Education are made a part of this agreement. The obligations of this agreement shall begin at 12:00 p.m., EST, March 10, 1970, and shall terminate at 12:00 p.m., EST, June 5, 1970, with subsequent work to be done by EPIC under a new agreement.

10. Entire Agreement

This contract constitutes the entire and only agreement between the parties named hereto and may be ammended by an instrument in writing by authorized signatures and the date thereof with the intent to be bound thereby.

EPIC Evaluation Center Tucson, Arizona	Texarkana Public Schools Texarkana, Arkansas
by: Robert E. Kraner Robert Kraner, Assistant Director	by: Edward D. Trice
date: 3-5-70	date: 3-12-70

Appendix F

TEXARKANA-EDL CONTRACT

CONTRACT

BETWEEN THE

TEXARKANA SCHOOL DISTRICT #7

and

EDUCATIONAL DEVELOPMENTAL LABORATORIES, INC.
A DIVISION OF McGRAW-HILL

THIS CONTRACT, made and entered into this 18th day of September, 1970, by and between the Texarkana School District #7, a public school District organized and existing under the laws of the State of Arkansas, with principal offices located at 1500 Jefferson Avenue, Texarkana, Arkansas 75501 (hereinafter called LEA), and the JOINT VENTURE comprised of EDUCATIONAL DEVELOPMENTAL LABORATORIES, INC., a Division of McGraw-Hill, a private corporation organized and existing under the laws of the State of New York with principal offices located in Huntington, New York, (hereinafter referred to as the Contractor), and Arkansas School Service, Inc., a private corporation (a franchised dealer of EDL/McGraw-Hill) organized and existing under the laws of the State of Arkansas with principal offices located at 1911 Thayer Street, P.O. Box 2901, Little Rock, Arkansas 72203, and Texas Educational Aids, a private corporation (a franchised dealer of EDL/McGraw-Hill) organized and existing under the laws of the State of Texas with principal offices located at 120 East Elm, Tyler, Texas 75701. This contract is based upon the Texarkana School District #7, Arkansas, RPP #2 and the continuation proposal financed by U.S. Office of Education administered ESEA Title VIII grant number OEO-0-9-130045-3300281), the Proposal submitted by EDL August 13, 1970, and Addendum September 15, 1970, and documented negotiated details September 24, 1970, and is incorporated by reference and made part, hereof.

It is intended to stipulate the scope of work, responsibilities, and obligations assumed by both parties. If further details are required to interpret matters arising under it, the above documents and all controlling local state, and federal laws and regulations and their issues are incorporated in this contract by reference. In instances of conflicts within and between said incorporated documents, resolution will follow, in descending order of authority: (1) Federal laws, regulations, and their issues; (2) State laws, regulations, and their issues; (3) Local laws, regulations, and their issues and (4) Mutual convenience of the contractual parties.

Performance under this contract shall commence September 28, 1970 and terminate June 30, 1971.

OPTION TO RENEW

A. By April 1, 1971 the Contractor will submit in six copies a detailed statement of work planned to be accomplished during the next program year and six copies of a detailed P.P.B.S. budget to support this plan.

B. The LEA will provide written notice to the Contractor by June 21, 1971, based on the meeting and agreement reached by the combined school boards at their June 15, 1971, meeting of their option to review the program for the subsequent year.

I. SCOPE OF WORK

The long-range goals of the Texarkana Dropout Prevention Program are:

1. To significantly reduce the percentage of dropouts in the Texarkana and Liberty-Eylau school districts.

2. To increase academic achievement and skill development of students who are educationally deficient.

3. To increase the cost effectiveness of the instructional program in the Texarkana and Liberty-Eylau school districts.

II. DUTIES OF CONTRACTOR

Using the existing facilities, the Contractor shall establish and operate a teacher support program at a minimum of one learning center located at each of the following schools: College Hill Junior High School; Jefferson Avenue Junior High School; Arkansas Senior High School; Liberty-Eylau Junior High School; and Liberty-Eylau Senior High School.

III. RESPONSIBILITIES OF CONTRACTOR

1. The Contractor agrees to provide an instructional learning system appropriate to the individual needs of the target population.

2. Whenever appropriate, the Contractor agrees to make maximum use of LEA facilities and equipment resources located at the school sites, i.e., mobile units, furnishings, desks, etc.

3. The Contractor agrees to purchase, assemble, install, and maintain all Contractor-owned equipment which will be utilized during the school year at his costs.

4. The Contractor agrees to apply all rental costs to the purchase of any equipment and material on lease at the price quoted in the Contractor's 1971 published catalog. The LEA will have the option to exercise its rights under this contract at any time prior to June 30, 1971, for all equipment and materials used during the 1970-1971 school year. The Contractor agrees to conduct program operations for students in the late afternoon or early evening. The additional cost to LEA for operating these evening centers shall not exceed the established costs for the operation of regular learning centers for similar students.

5. The Contractor agrees to conduct his operational program within the contraints of, and in accordance with, the intent and conditions of the evaluation design.

6. The Contractor agrees to obtain the approval of the LEA in employing all instructional personnel used in the project. Whenever possible, personnel will be employed from the local community.

7. The Contractor agrees to train and monitor all personnel employed to operate the instructional program in the learning centers.

8. The Contractor agrees to provide a list of performance objectives for his instructional program in reading and mathematics. The objectives must stipulate the individual student achievement level required, and the cycle and level of instruction for which these objectives are appropriate. (See Section VIII, Item 2, Page 7.)

9. The Contractor agrees to submit a student attendance record daily, and report to the project director at the time a student drops out of the program.

10. The Contractor agrees to report the instructional system cost for implementation, and projections to the project director on April 1, 1971 as set forth in Exhibit B.

11. The Contractor agrees to indemnify the LEA from any liability for damage to the Contractor-owned property.

12. The Contractor agrees to the responsibilities outlinted in the proposal and addendum and RFP as identified but not specifically included in this contract.

13. The Contractor agrees to instruct all personnel employed to operate the instructional program in the Rapid Learning Centers that if they are party to information relative to the standardized test being employed by the LEA's internal evaluator to determine the guarantee performance level of the Contractor, the individual who has learned this information shall be immediately responsible for reporting such facts in writing to his project director.

IV. RESPONSIBILITIES OF LEA

1. The LEA agrees to schedule and initially provide to the Contractor no more than 300 students with an IQ of 75 or higher as measured by a locally administered intelligence test fulfilling the following entry criteria: (a) students in the 1969-70 Rapid Learning Center (Phase I) program who did not gain one or more grade levels in reading comprehension or mathematics (b) seventh-grade students who are two or more grade levels deficient in reading and/or mathematics, and (c) students in grades 8-12 who are two or more grade levels deficient in reading and/or mathematics. If any question exists regarding the entry level of an individual student, the case must be referred within fifteen student class days in the project according to a negotiation procedure agreed upon by the LEA and the Contractor. Within fifteen lays

following referral of an individual, a meeting must be scheduled between the project director and the component manager at which time disposition of the individual case will be made.

2. The LEA will be responsible for ensuring that any RLC student enrolled and in attendance for that particular day will attend the specific component classes operated by the Contractor. It will be the responsibility of the LEA to ensure that RLC students attend regular school classes to the greatest extent possible. Specific after-school program operating hours will be established to allow RLC students who have been absent to complete the work they have missed.

3. The LEA agrees to make the RLC student available to the Contractor for a maximum of 140 days prior to the final posttest. If, in fact, fewer than 140 days of instruction are scheduled during the period of the project for whatever reason (other than fault of the Contractor), the performance guarantee will be reduced proprotionate to the number of days of instruction. (Example: 120 days of instruction: Guaranteed performance level would be 120/140, or 6/7, of the original level.)

4. The LEA through its internal evaluator will be responsible for supervising the administration and scoring of the tests; and continued review and analysis of all material used by the Contractor in the program.

4. The LEA through its internal evaluator will be responsible for supervising the administration and scoring of the tests; and continued review and analysis of all material used by the Contractor in the program.

5. The LEA agrees to schedule RLC students to the Contractor for 45 to 55 minutes per day per subject matter area in which the student is enrolled.

6. The LEA agrees to provide office space for Contractor's onsite component manager. Other operational expenses such as secretarial help, supplies, equipment, etc., shall be the responsibility of the Contractor.

7. The LEA agrees to appropriately maintain all space to be used by the Contractor in the instructional program.

V. PERFORMANCE REQUIRED OF CONTRACTOR

1. The Contractor guarantees that each student in the program

will increase his achievement in reading and/or mathematics by 1.0 to 1.9 grade levels.

2. The Contractor guarantees that each student will successfully pass 75% of the terminal criterion-reference items.

3. The Contractor agrees that he shall be responsible for all dropouts from the RLC following the initial two weeks of operation. The definition of a program dropout is found in Section VI of this contract.

4. The Contractor shall guarantee that the operating costs of the proposed instructional system will decrease as a result of increased student enrollment, or through efficiencies when applied to a target population prescribed during the performance of this contract.

5. The Contractor's instructional system utilized during the school year 1970-71 Phase II will be guaranteed to maintain the cost-effectiveness level demonstrated during the 1970-71 Phase II school year if the LEA adopts and incorporates it under the same leasing conditions into grades 7-12 in the regular school system during the school year 1971-72 Phase III. This guarantee applies only if the LEA utilizes the Contractor's complete program, operant under the same conditions as obtained throughout school year 1970-71 Phase II.

6. The Contractor agrees to train to his standards a minimum of ten mathematics teachers, ten English teachers, and two equipment maintenance persons from the participating school district's personnel to operate the learning center turnkey program for Phase II (1971-72). The LEA shall select the teachers to be trained. The Contractor will provide information on teacher training cost.

7. The internal evaluator shall, during the period two weeks prior to the posttest, make a quality control check of the instructional materials in use in the program to determine whether the Contractor has fulfilled the requirements listed in Exhibit A. Should the quality control check indicate drilling of exposed items during the two-week period immediately prior to posttesting, the Contractor shall be liable for the cost of a complete comparison analysis of all instructional "bits" used in the two-week period with all test items, and in addition shall be penalized $1,000.00 for each exposed item.

8. The Contractor shall not include in any of his instructional materials any exercises that are the same as the items used in the tests that will be used to determine how much the Contractor will be paid. The definition of "same" would be determined by the rules in Exhibit A. These rules apply only to instructional materials that have been copyrighted since the inception of Phase II.

VI. METHOD OF MEASURING PERFORMANCE

A. DEFINITIONS

The following definitions shall apply in the program:

1. A student will be considered a dropout from the program if he or she leaves school or the program and does not reenter within thirty days. Exceptions to this definition are: (a) if a student is drafted into military service (b) if a student is physically or mentally incapacitated to such an extent that he or she is not able to participate in the project and attend school as certified by a licensed physician, or (c) other reasons mutually agreed upon by the project director and the Contractor.
2. The starting time for each RLC student will be the first day the student enters the program. Any exception to this procedure must be agreed upon by the project director and the Contractor, and any such agreement must be made in writing.
3. The ending time for the instructional program for each student shall be the date when the final standardized test is administered to the student. If the student takes the January and May 1971 standardized tests, the latter date shall be considered the ending date. Exiting of students who have demonstrated exceptional achievement will be by the mutual argument of the project director and the EDL component manager.
4. Actual instructional time is the net instructional time spent in the program.
5. Students attending RLC's will be referred to herein as student.

VII. BASIS OF PAYMENT

1. Determination of total payment to the Contractor will be based on the (a) achievement gain made by each student on the standardized tests, and (b) extent to which each student achieves the final criterion-reference measure.

2. Seventy-five (75%) per cent of total payment will be based on the results of the standardized tests, and twenty-five (25%) per cent of total payment will be based on the results of student achievement on final criterion-reference measure.

3. Total maximum project costs of $65,788.00 are to be distributed as follows:

   Fifty (50%) per cent of the Fixed Charge, $19,506.00, will be paid the Contractor at the signing of the contract; and the remaining fifty (50%) per cent, $19,506.00, will be paid the Contractor on or before December 1, 1970. Final payment in the amount of $26,776.00 will be made to the Contractor subject to adjustment downward based on performance and the conditions set forth under Section V. Item 7, above, and Section IX, below, on or before June 30, 1971.

VIII. PROCEDURES

1. Standardized tests used to measure performance will be selected by the project director, and approved by the internal evaluators from the nationally standardized tests generally available to the school market. The project director will have authority over all pre- and posttesting conditions, and will adhere to standard testing procedures and scoring practices as defined by the test publisher. He will determine when the tests will be given, and which forms of the selected tests will be given to individual students. The Contractor will not be told what test or what forms of the test have been or will be used for each student.

2. The Contractor must submit to the project director a pool of criterion-referenced test items. At least five (5) times the number of behavioral objectives inherent in the structure of the system to be used must be submitted and approved by the internal evaluator thirty (30) days after initiation of the program.

IX. FORMULA FOR PAYMENT

A. Student Point

A student point is a unit of measure in the amount of $26,776.00 divided by the total point value for the number of assigned students. Each student will be assigned 4 points for mathematics and/or 4 points for reading.

Four points were selected in order to facilitate the computation for each student in each subject area on the basis of 75% payment (3 points) for norm reference tests and 25% payment (1 point) for criterion reference tests.

B. Computation of Contractor Performance Payment

1. Ranges of growth per student for point assignment

Penalty:

Up to and including .9 years growth (math)	3 penalty pts.
Less than 75% achievement on final criterion-referenced measure (math)	1 penalty pts.
Up to and including .9 years growth (reading)	3 penalty pts.
Less than 75% achievement on final criterion-referenced measure (reading)	1 penalty pts.

Achievement Guarantee:

1.0 to 1.9 years growth (math)	No assignment of pts.
Satisfactory achievement on final criterion-referenced measure (math)	No assignment of pts.
1.0 to 1.9 years growth (reading)	No assignment of pts.
Satisfactory achievement on final criterion-referenced measure (reading)	No assignment of pts.

Bonus:

2.0 or greater years growth (math)	3 bonus pts.
85% or greater achievement on criterion-referenced measure (math)	1 bonus pts.
2.0 or greater years growth (reading)	3 bonus pts.
85% or greater achievement on criterion-referenced measure (reading)	1 bonus pts.

2. Computation for final payment

Following point assignment for all student, the balance (bonus points minus penalty points) will be used to determine final payment to Contractor.

Penalty:

$26,775.00 - (Student point value x penalty pt. bal.)

Achievement Guarantee:

$26,775.00 - (No penalty/no bonus)

Bonus:

$26,775.00 + $1.00 - (Contractor agreed acceptance for bonus condition, regardless of number of bonus points earned.)

C. Payment Related to Student Withdrawal for Cause

If the student leaves the project for cause, the Contractor will receive cost reimbursement of the $26,776.00 held in escrow based upon a linear proration of Contractor's costs up to the time of the student's departure. The Contractor's reimbursement for the exiting student's final performance and his or her performance on any interim performance objectives that have not been tested will be based upon a proration of the mean gain of the student's class, up to the time of the student's departure.

X. TEACHER TRAINING

Teacher training for the project will be conducted by EDL personnel. The teaching staff will be selected from the LEA district for training and continued teaching activities within the learning center. Five lab directors and five paraprofessionals will be selected for training, with final approval of the Contractor and the LEA. They will be scheduled for a five-day, forth-hour training period prior to installation of the systems. Additional teachers will be selected and trained concurrently to provide a corpus of trained specialists who will be able to continue the instructional program if any staff members are unable to complete the year due to extended illness or normal teacher attrition. The Contractor agrees to train 20 additional district staff members in the operation of the system. The intent here is to form a nucleus of trained professionals within the Texarkana districts who can be used as resource teachers or staff development consultants during subsequent phases of the Texarkana Dropout Prevention Program. The initial training period will consist of five consecutive days. Training will include the component manager, all lab directors, and all paraprofessionals and resource consultants (staff members to be trained). The training schedule (See Appendix B, Contractor Proposal) will be adhered to during the five-day initial training period. Twenty hours of ongoing in-service training sessions or visitations will be conducted by EDL or authorized representatives. The resource consultants will act as consultants to lab directors as required, and will assume responsibility for assisting EDL teacher training personnel during ongoing in-service training sessions.

XI. TEACHER ADMINISTRATION POLICY

The success of the LEA program depends on the willingness and ability of the teachers assigned to the program to use the methodology. If a personnel situation develops in which it appears that a teacher may not be serving the best interest of the LEA program as mutually concluded by the component manager and the project director, the project director shall consider the replacement of such teacher.

XII. DISSEMINATION POLICY

Dissemination of information pertaining to planning, negotiation procedures, and interim activities related to the project will be mutually agreed on by project director and Contractor prior to its release to the public.

All information pertaining to evaluation or test results may be disseminated only by the project director. Subsequent to public release of data and information and/or following completion of the present contract, the Contractor will have the right to prepare and distribute evaluation reports, based on released data, and to distribute reprints of this evaluation to interested parties.

XIII. VISITATIONS

Visitation privileges will be extended at the discretion of and with mutual agreement between the project director and the Contractor. Specified times and sites for visitation will be established, and made available upon request to potential visitors.

XIV. SUCCESSORS AND ASSIGNEES

All terms, conditions, and provisions hereof shall inure to and shall bind the parties hereto, their, and each of their respective heirs, executors, administrators, successors and assignees. Contractor shall not subcontract, assign, mortgage, encumber or otherwise transfer any interest in this agreement.

XV. CONVENANT AGAINST CONTINGENT FEES

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fees, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty the LEA which have the right to annul this contract without liability or any discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of said commission, percentage, brokerage, or contingent fee.

XVI. EQUAL EMPLOYMENT OPPORTUNITY (Section 202, Executive Order 11246, September 24, 1965, 30FR 11269)

"During the performance of this contract the Contractor agrees as follows:"

1. "The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The Contractor will take affirmative action to insure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not to be limited to the following:

   Employment, upgrading, demotion, or transfer, recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this non-discrimination clause."

2. "The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin."

3. "The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contracts or understanding, a notice, to be provided by the agency contracting officer advertising the labor union or workers representative of the Contractor's commitments of Section 202 of Executive Order #11246 of September 24, 1965, and shall post copy of the notice in conspicuous places available to employees and applicants for employment."

4. "The Contractor will comply with all provisions of Executive

Order #12246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor."

5. "The Contractor will furnish all information and reports required by Executive Order #12246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or persuant thereto, and will permit access to his books, records, and accounts between contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders."

6. "In the event of the Contractor's non-compliance with the nondiscrimination clauses of his contract or with any of such rules, regulations, or orders, his contract may be cancelled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order #12246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order #12246 of September 24, 1965, or by rules, regulation or order of the Secretary of Labor or as otherwise provided by law."

7. "The Contractor will include the provision of #137 in every subcontractor purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued persuant to Section 204 of Executive Order #12246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as a contracting agency may direct as a means of enforcing such provisions including sanctions for non-compliance: provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interest of the United States."

XVII. CERTIFICATION OF NON-SEGREGATED FACILITIES

The Contractor or subcontractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location under his control, where segregated facilities are maintained. The Contractor or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification the term "segregation facilities" means waiting rooms, work areas, rest rooms and wash rooms, and restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color or national origin, because of habit, local custom, or otherwise. He further agrees that (except where he has obtained identical certifications from proposed subcontractors for specific periods) he will obtain identical certifications from proposed subcontractors prior to the aware of subcontracts exceeding $10,000.00 which are not exempt from the provisions of the Equal Opportunity clause; that he will retain such certifications in his files; and that he will forward the following notice of such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

XVIII. NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NON-SEGREGATED FACILITIES

A certification of non-segregated facilities, as required by the May 9, 1967, Order (32 FR 7439, May 19, 1967) on elimination of segregated facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontractor or for all subcontracts during a period (i.e., quarterly, semi-annually, or annually).

Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

IN WITNESS WHEREOF, the parties have caused this agreement to be signed in their behalf by their duly authorized representatives on the day and year first written above.

CONTRACTOR	LEA
______________________________	______________________________
Edmund Zazzera President EDL/McGraw-Hill	______________________________ ______________________________

Notarized Certifications:

Appendix G

CONTRACT BETWEEN TEXARKANA AND REGION VIII EDUCATION SERVICE CENTER, 1970-71

KNOW ALL MEN BY THESE PRESENTS, that, Texarkana School District #7, Miller County Arkansas, a public school system incorporated in the State of Arkansas with principal offices at Texarkana, Arkansas, designated as Fiscal Agent for a planned "dropout prevention project" to be funded by the U. S. Office of Education, hereinafter described as the "Agent", for and in consideration of five dollars ($5.00). and other valuable consideration, receipt whereof is hereby acknowledged, does hereby contract and agree with the Region VIII Education Service Center a cooperative regional education agency administered by the Magnolia Arkansas School District #14, Columbia County, Arkansas, a public school system incorporated in the State of Arkansas and with principal offices in Magnolia, Arkansas, hereinafter described as the "Contractor" as follows:

WITNESSETH THAT:

WHEREAS, the Agent has received continuation of an operational grant for Phase

II under the auspices of the U. S. Office of Education to conduct a "Dropout Prevention Program" in the Texarkana, USA, area, and desires certain technical and management assistance in the operation of such program, and

WHEREAS, the Contractor is prepared to provide certain technical and management assistance and advice to the Agent in the operation of such program. (See Attachment I)

NOW THEREFORE, the parties do mutually agree as follows:

I. Scope of Work

The services to be performed by the contractor encompass the following areas of work: (a) curriculum services, (b) evaluation services and (c) management support services.

A. The contractor shall perform the following evaluation services:

1. Refine and complete the evaluation design for Phase II by September 1, 1970.

2. Develop the necessary evaluation forms, questionnaires, and instruments designated as the responsibility of the internal evaluator according to the time schedule in the evaluation design.

3. Monitor the collection of information required in the evaluation design.

4. Provide the project director an interim evaluation report by February 15, 1971.

5. Analyze the data obtained for evaluation purposes and provide the project director with feedback information on the analysis.

6. Provide the project director with all information and/or reports deemed necessary for efficient operation of the program.

7. Present to the project director a final evaluation report by August 31, 1971.

Dr. Lawrence H. Roberts will represent the contractor in the performance of the evaluation services. Dr. Roberts has his Ph.D. degree in Counseling and Guidance, and has extensive work experience in teaching, evaluation, and governmental work. During the past year, Dr. Roberts was coordinator of Programs, Region VIII Education Service Center. He holds membership in numerous professional associations including the American Psychological Association, American Personnel and Guidance Association, National Education Association, Phi Delta Kappa and similar groups.

The estimated cost for performing the evaluation services is $17,400.00.

B. The contractor shall perform the following curriculum services:

1. Develop and implement a pre-service and in-service training program for turnkey teachers. The pre-service training program will be complete by September 1, 1970, while the in-service will continue throughout the school year.

2. Monitor and provide consultative assistance to the turnkey program throughout the school year.

3. Provide the necessary management competencies as needed in the operation of the turnkey program.

4. Develop dissemination information as needed about the turnkey program for various audiences and/or recipients.

5. Organize a curriculum study committee and help conduct a study of the needed vocational education programs. The study is to be completed by June 1, 1971.

6. Assist in the planning and development of a grading system appropriate to a self pacing instructional program. An appropriate grading system is to be developed by June 1, 1971.

7. Identify the students for the turnkey program by August 15, 1970.

Dr. Lewis Lemmond will represent the contractor in the performance of the curriculum services. He will be located in Texarkana and will devote full time to the services outlined under this contract. Dr. Lemmond has his Ph.D. degree in Supervision, curriculum, and instruction. He has work experience at all levels of education including teaching, supervision, and administration. Dr. Lemmond holds membership in the National Education Association, American Association of School Administrators, National Association of Secondary School Principals, Phi Delta Kappa and numerous regional and state professional associations.

The estimated cost for performing the curriculum services is $9,200.

C. The contractor shall perform the following management support services.

1. **Help develop and write a "request for proposal" to be used in obtaining bids for prospective contractors by July 20, 1970.**

2. Assist in the development of a criteria by which a contractor might be chosen. A point system for evaluating contractor's bid will be developed by August 15, 1970.

3. Develop a list of tasks needed to initiate and operate the learning center, turnkey, curriculum and instruction, and the counseling and guidance components.

4. Help as needed in the development of an information dissemination system for persons within the project, as well as for those outside the project area.

5. Assist the project director in the preparation and writing of reports and the continuation proposal.

6. Assist in the development of a financial record system and correlating the cost information with the records system.

Dr. Dean C. Andrew will represent the contractor in the performance of the management support services. Dr. Andrew has his Ph.D. degree in Educational Psychology and is presently Associate Director of the Region VIII Education Service Center. He possesses considerable experience in teaching, research, and administration. Dr. Andrew is the author of several books and numerous journal publications in the field of education. He has conducted or has assisted in several planning studies involving the education, health, and rehabilitation fields. Dr. Andrew holds membership in the American Psychological Association, American Personnel and Guidance Association, American College Personnel Association, National Education Association, and several regional and state professional organizations.

The estimated cost of the management support services is $5400.00.

II. Responsibilities of the Fiscal Agent

A. Consultation

The fiscal agent and participants staff members shall cooperate with the contractors representatives, and shall make themselves available at all reasonable times during ordinary working hours during the period of the contract. They shall be willing to confer with contractor on any problems that arise, and assist in the planning and implementations of the services included in this contract.

B. Information

The fiscal agent or his designate shall cooperate with the contractor's representative in providing all information essential to carrying out the scope of work described herein.

C. Inspection and Reports

The fiscal agent shall have the right at all times during the period of the contract to inspect the work performed by the contractor, and to request brief interim oral or written reports of work progress from the contractor as may be reasonably necessary to assure proper performance of the contract.

III. Period of Performance

The services of the contractor are to commence on July 1, 1970, and will end June 30, 1971.

IV. Compensation and Method of Payment

A. Compensation

1. To perform the services outlined in this contract, the Fiscal Agent shall pay to the contractor a sum of money not to exceed $32,000, and it is to include all costs and expenses related to this agreement and represents payment in full for the complete and satisfactory services noted herein. (See

budget, attachment II.)

2. The payment under this agreement will be made upon presentation of a requisition for payment by the contractor, and will specify expenditures for the following line items:

   a. Personnel

   b. Travel

   c. Supplies, equipment, and services

   d. Overhead and miscellaneous

B. Method of Payment

1. The dates listed on the evaluation design represent deadlines for performance of various, services except where changes in deadline dates are mutually acceptable to the Fiscal Agent and the contractor.

2. Payments to the contractor shall be made according to the following schedule:

   a. Upon execution of this agreement, the contractor shall present a requisition to the Fiscal Agent for the advance of ~~25% of the total~~ budget amount of $32,000, which is $8,000.

   b. On October 1, 1970, January 1, 1971, and April 1, 1971, the contractor shall present a requisition to the Fiscal Agent for the advance ~~of 20% of the total budget amount of $32,000~~, ~~which is~~ $6.400 for each remaining quarter of the contract period.

   c. Upon acceptance of the final evaluation report by the Fiscal Agent, the contractor shall present a final requisition ~~to the Fiscal Agent~~ for 15% of the total budget ~~amount of~~ $32,000, or $4,800.

V. Changes and Conditions

Changes, additions, or conditions to this contract may be made only by mutual agreement of the parties.

In witness whereof, the parties hereto have executed this contract this 1 day of July, 1970.

WITNESSED:

____

____

Texarkana School District No. 7
By________________________
Fiscal Agent

Region VIII Education Service Center
By________________________
Director

Carlton Hasley
Superintendent, Magnolia
School District No. 14

Appendix H

CONTRACT BETWEEN TEXARKANA AND EPIC EVALUATION CENTER, 1970-71

KNOW ALL MEN BY THESE PRESENTS, that, Texarkana School District #7, Miller County, Arkansas, a public school system incorporated in the State of Arkansas with principal offices at Texarkana, Arkansas, designated as Fiscal Agent for a planned "dropout prevention project" to be funded by the U. S. Office of Education, hereinafter described as the "Agent," for and in consideration of five dollars ($5.00) and other valuable consideration, receipt whereof is hereby acknowledged, does hereby contract and agree with EPIC Diversified Systems Corporation, a private Arizona corporation with principal offices at Tucson, Arizona, hereinafter described as the "Contractor," as follows:

WITNESSETH THAT:

WHEREAS, the Agent has received continuation of an operational grant for

Phase II under the auspices of the U. S. Office of Education to conduct a "Dropout Prevention Program" in Texarkana, USA, area, and desires certain technical assistance in the operation of such program, and

WHEREAS, the Contractor is prepared to provide certain technical assistance and advice to the Agent in the operation of such program. (See Attachment I.)

NOW THEREFORE, the parties do mutually agree as follows:

1. Scope of Work to be Performed by Contractor

The services to be performed by the Contractor for the general purpose of:

1. verifying the results of the project evaluation, and
2. assessing the appropriateness of the evaluation procedures.

The more specific services to be performed by the Contractor shall include: (See attachment)

1. To verify the implementation of the project evaluation design.
2. To review the evaluation forms, questionnaires, and instruments required in the evaluation design.
3. To review the monitoring of the collection of information required in the evaluation design and as reported by the internal evaluator.
4. To verify the analysis of data as gathered and reported by the internal evaluator to the project director.
5. To review and report on the information and/or reports presented by the internal evaluator to the project director.

6. To provide the project director with two major Audit reports--one based on the Interim Evaluation Report and the other based on the Final Evaluation Report presented by the internal evaluator.

II. Audit Personnel

The Educational Program Auditor will be Dr. Robert E. Kraner, utilizing a team of support personnel from the EPIC Diversified Systems Corporation. The support personnel will be Dr. Terry Cornell, Evaluation Design Specialist, Mr. Allan Gibson, Measurement and Statistics Specialist, and Dr. Robert Armstrong, Project Management Specialist. The resumes of these people are presented in Attachment I.

III. Audit Sampling Technique

Due to the extreme need for accuracy for all testing scores utilized for payment purposes, the evaluation activities directly associated with the administering, scoring, and tabulating of these data will be thoroughly monitored and all statistical analyses duplicated.

Other evaluation data results will be spot-checked on a basis of not less than 5% of the total

IV. Audit Plan Schedule (October 15, 1970-June 30, 1971)

1. October 15 (or at scheduled pre-testing)--On-site Visitation
    a. Observe pre-testing procedures and conditions.
    b. Interview teachers and students in the project.

2. October 31--Report to Project Director on reported evaluation activity and data.

3. November 30--Report to Project Director on reported evaluation activity and data.

4. December 31--Report to Project Director on reported evaluation activity and data.

5. January 10--On-site visitation
    a. Spot check reported evaluation activity.
    b. Interview project personnel.

6. February 1--Process Audit Report to Project Director

7. March 31--Report to Project Director on reported evaluation activity and data.

8. April 30--Report to Project Director on reported evaluation activity and data.

9. May 25 (or at scheduled post-testing)--On-site Visitation
    a. Observe post-testing procedures and conditions.
    b. Interview project personnel.

10. June 25-(or twenty days after receiving final evaluation report)--Final Audit Report

V. Responsibilities of the Fiscal Agent

A. Consultation

The fiscal agent and participating staff members shall cooperate with the contractor's representatives, and shall make themselves available at all reasonable times during ordinary working hours during the period of the contract. They shall be willing to confer with the contractor on any problems that arise, and assist in the planning and implementing of the services included in this contract.

B. Information

The fiscal agent or his designate shall cooperate with the contractor's representative in providing all information essential to carrying out the scope of work described herein and as presented in Attachment B, *Outline of Educational Program Auditing Procedures*, U.S.O.E.

C. Inspection and Reports

The fiscal agent shall have the right at all times during the period of the contract to inspect the work performed by the contractor, and to request brief interim oral or written reports of work progress from the contractor as may be reasonably necessary to assure proper performance of the contract.

VI. Period of Performance

The services of the contractor are to commence on October 15, 1970, and will end June 30, 1971.

VII. Compensation and Method of Payment

A. Compensation

1. To perform the services outlined in this contract, the Fiscal Agent shall pay to the contractor a sum of money not to exceed $7,002.60, and it is to include all costs and expenses related to this agreement and represents payment in full for the complete and satisfactory ser-

vices noted herein. (See budget, attachment II.)

2. The payment under this agreement will be made upon presentation of a requisition for payment by the contractor and will specify expenditures for the following line items:
   a. Personnel
   b. Travel
   c. Supplies, equipment, and services
   d. Overhead and miscellaneous

B. Method of Payment

1. The dates listed on the evaluation design represent deadlines for performance of various services except where changes in deadline dates are mutually acceptable to the Fiscal Agent and the contractor.

2. Payments to the contractor shall be made according to the completion of the following schedule for the following amounts:

	Date	Activity Related to Payment	Amount of Payment
1.	October 15	On-site Visitation	$1,400.52
2.	December 31	Report to Project Director	1,400.52
3.	February 1	Process Audit Report	1,400.52
4.	April 31	Report to Project Director	1,400.52
5.	May 25	On-Site Visitation	1,400.52

VIII. Changes and Conditions

Changes, additions, or conditions to this contract may be made only by mutual agreement of the parties.

In witness whereof, the parties hereto have executed this contract this twenty-eighth day of September, 1970.

Texarkana School District No. 7

By Edmund D. Price
Fiscal Agent

EPIC Diversified Systems Corporation

By Robert E. Kramer
President

EDUCATIONAL PROGRAM AUDIT BUDGET

Direct Labor Costs:

One Educational Program Auditor (18 days)	$2,700.00
One Evaluation Design Specialist (2 days)	300.00
One Measurement and Statistics Specialist (2 days)	300.00
One Project Management Specialist (2 days)	300.00

Other Direct Costs:

Travel:

a. Air Fare (3) Tucson-Texarkana	516.00
b. Per Diem (5 days @ $30.00)	150.00

Materials and Reproductions	300.00
Computer Facility and Personnel (complete check and verification of scores serving as basis for payment and their statistical analyses as reported)	1,800.00
Sub-total	$6,366.00
10% Overhead (facilities and equipment)	636.60
Total	$7,002.60

Appendix I

CONTRACT BETWEEN TEXARKANA AND EDUCATIONAL CONSULTANTS, INC., FOR PPBES DESIGN

CONTRACT
BETWEEN THE
TEXARKANA SCHOOL DISTRICT #7
and
EDUCATIONAL CONSULTANTS, INC.

This contract is hereby made and entered into by and between the Texarkana School District #7, a public school district organized and existing under the laws of the State of Arkansas, with principal offices located in Texarkana, Arkansas (hereafter called the school district) and Educational Consultants, Inc., a private corporation organized and existing under the laws of the State of Georgia with offices located in Athens, Georgia (hereafter called the Consultants), and existing under the laws of the State of Arkansas, with principal offices located in Texarkana, Arkansas (hereafter called the school district) and Educational Consultants, Inc., a private corporation organized and existing under the laws of the State of Georgia with offices located in Athens, Georgia (hereafter called the Consultants).

PURPOSE

It is the intent and purpose of this agreement to stipulate the scope of the work to be performed under this agreement and to describe the responsibilities and obligations of each party to this contract.

SCOPE OF THE WORK

The work to be performed by the Consultants is as follows:

1. To prepare a cost reporting format to be used by the Technology Contractor in reporting costs to the Texarkana School District in connection with its performance contract financed under an ESEA Title VIII grant.
2. To prepare a program budgeting format which will serve as a basic guide for the future implementation of a program budgeting system by Texarkana School District #7. The minimum essential design elements will include an outline for the district to use in the development of goals and objectives, a program structure, a budget format including accounting forms, a chart of accounts, code numbers and a cost evaluation format including some suggested cost analysis technics.
3. To develop a sub-program budgeting format for the experimental phase of the Title VIII grant and provide assistance to the district with its implementation in the 1970-71 program.
4. To analyze costs related to Title VIII Program product objectives concerning pupil achievement gains and dropout prevention and to compute cost/effectiveness ratios

for pupil achievement gains in mathematics and reading for the experimental program, the turnkey program, and for comparable pupil groups in the regular school district program.

5. To provide an in-service program on PPBES to include a maximum of three days and for not more than twenty-five (25) persons selected by the school district.

RESPONSIBILITIES OF THE CONSULTANTS

1. The consultants agree to provide consulting, advisory, and production services necessary to accomplish the scope of the work as outlined herein.
2. The consultants agree to furnish the school district a report in draft form describing the components outlined in the scope of the work (except the in-service program).
3. The consultants will assume responsibility for all travel directly related to the project conducted outside of the Texarkana area and all living expenses related to the project both in and out of Texarkana.
4. The consultants agree to use Dr. C. W. McGuffey as Project Director for this project. Dr. McGuffey will give direct and continuing supervision to the activities of personnel involved in this project.

RESPONSIBILITIES OF THE SCHOOL DISTRICT

1. The school district agrees to provide suitable work facilities and materials for use by the Consultants as its staff members report for work in Texarkana. Such facilities shall include suitable work stations, calculating machines, copying services, typing services, and access to a telephone as the need occurs.
2. The school district agrees to furnish needed background and other information promptly and will assure cooperation of its staff members in the completion of this project.

3. The school district agrees to furnish to the consultants all achievement and drop-out data needed for computing cost/effectiveness ratios. Similarly, all fiscal data required for the successful completion of the project will be made readily available to the consultants in the requested format.

4. The school district agrees to serve as the intermediary in obtaining needed data from the Technology Contractor.

5. The school district agrees to type and reproduce the final report as may be required for its use.

COMPLETION SCHEDULE

1. The total project shall be completed not later than July 30, 1971.

2. Tentative completion dates for components of the project are:

a.	Fiscal reporting format for Technology Contractor	December 1, 1970
b.	Program budgeting format for Title VIII program	January 11, 1971
c.	Cost analysis to compute cost/effectiveness ratios (15-20 days after data is made available)	June-July, 1971
d.	Program budgeting format for school district	June 30, 1971
e.	In-service program on PPBES	As arranged by School District

COMPENSATION AND METHOD OF PAYMENT

For services as outlined herein, the School District agrees to pay the Consultants the sum of nine thousand six hundred and ten dollars ($9,610.00). This amount shall be paid in seven (7) installments of $1,200.00 each, beginning December 1, 1970 and on the first of each succeeding month thereafter for six additional months, and a final payment of $1210.00 upon the completion and submission of the final draft of the report of the PPBES format and the cost/effectivenss ratios to the School District.

IN WITNESS WHEREOF, the parties to this contract have caused this agreement to be signed in their behalf by their duly authorized representatives on the day and year as indicated below.

On behalf of the Texarkana School District #7.

Date	Ed Trice, Superintendent

Notary:

On behalf of the Educational Consultants, Inc.

Date	C. W. McGuffey, President

Attested to by:

Secretary-Treasurer